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NEBRASKA COUNTY PERSONAL INCOME

The economies of Nebraska's counties vary considerably in size and composition. During the period 1976-1978, Nebraska's ten largest counties[1] accounted for 63 percent of the state's total personal income. These counties were generally centers of trade, manufacturing, finance, government, and services. At the same time, however, in two-thirds of Nebraska's counties, agriculture was still the most important sector.

This article will present an analysis of the economies of Nebraska's counties by focusing on personal earnings and incomes of these counties during the period 1976-1978. Although personal income does not reflect all the economic activity of an area, these data are the best available measures of economic activity at the county level. County-level personal earnings and income data are estimated and released annually by the Bureau of Economic Analysis (BEA) of the United States Department of Commerce The latest year for which data are available is 1978.

Personal income data for small areas must be used with caution. These data are easily influenced by unusual conditions, which may be temporary, such as an excellent harvest, a major construction project (e.g., coal-fixed power plants), or a catastrophe (e.g., a drought or other adverse weather conditions). In addition, because agriculture is the major sector in many Nebraska counties, it should be noted that farm income is the most volatile and difficult-to-measure component of personal income. This volatility is due not only to changes in outputs, but also to dramatic changes in prices.

For these reasons, no single year can adequately reflect a county's economic situation. Most of the analysis in this article, therefore, is based upon averages for the years 1976, 1977, and 1978. It is hoped that this will smooth out some of the short-term fluctuations while maintaining the integrity of the data.

PRIMARY SOURCES OF PERSONAL EARNINGS

As used in this section, personal earnings consist of wage and salary payments, other labor income, and farm and nonfarm proprietors' income. It differs from personal income in that it excludes property income from interest, rents, and dividends; excludes transfer payments; includes contributions for social insurance; and is not adjusted for place of residence. Personal earnings also is called "total labor and proprietors' income by place of work." It must be remembered that property income and transfer payments can be major components of a county's personal income, since 30 percent of Nebraska's personal income derives from these areas. Furthermore, neither series includes corporate profits or corporate income taxes. Although personal earnings do not present the entire picture of an economy, they can be useful in determining its character.

Even though nonagricultural industries are important to many Nebraska counties, Figure 1 (p. 6) shows that during 1976-1978, the farm sector was still the primary source of earnings[2] for sixty-three counties. The degree of importance varied considerably, accounting for 18 percent in Cheyenne and Jefferson counties, while accounting for 66 percent in Wheeler County. These agricultural counties generally are located in rural areas and contain no city larger than 10,000 persons, but some counties, such as Washington, Saunders, and Cass, are adjacent to several metropolitan counties. It would be a mistake to assume that agriculture's (or any other sector's) influence is limited to what is directly produced in that sector. The economy of an area contains strong interrelationships among all sectors.

In the next largest group of counties, manufacturing was the principal industry. Thirteen counties fall in this category, with the degree of importance ranging from 20 percent in Keith and Phelps counties to more than 50 percent in Dakota County. Most of these counties contain one of the state's major cities and many lie in the Platte River valley.

Government was the major sector in eleven of Nebraska's ninety-three counties, and for the state as a whole. Two types of counties comprise this group: those with large state or federal government institutions, such as Dawes, Adams, Gage, Lancaster, Sarpy, and Wayne; and those sparsely populated counties in which the local government is predominant, such as Hooker, Thomas, Blaine, and Loup counties. The degree of dependence on government ranged from 18 percent in Merrick County to 75 percent in Sarpy County.

The most important sectors in the remaining six counties were services (Douglas, Seward, and Garfield); transportation, communication, and public utilities (Box Butte and Lincoln); and construction (Otoe).

RELATIVE IMPORTANCE OF PERSONAL EARNINGS BY SECTOR

Figure 1 indicates the major sector in each county, but it does not show the importance of these sectors in other Nebraska counties. Tables 1 and 2 (p. 2) rank the ten Nebraska counties with the highest portions of earnings originating

(Continued on page 3)

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[1] Based on personal income. The counties are Adams, Dodge, Douglas, Hall, Lancaster, Lincoln, Madison, Platte, Sarpy, and Scotts Bluff. In comparison, these counties accounted for 59 percent of the state's population in 1980.

[2] The primary source of earnings is that sector which directly accounts for the largest percent of total earnings.

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Table 1

RANKING OF NEBRASKA COUNTIES WITH RELATIVELY HIGHEST PORTION OF EARNINGS FROM FARM, MINING, CONTRACT CONSTRUCTION, MANUFACTURING, AND GOVERNMENT SECTORS: 1976-1978

Farm		Mining		Contract Construction		Manufacturing		Government	
County	Percent of Earnings	County	Percent of Earnings	County	Percent of Earnings	County	Percent of Earnings	County	Percent of Earnings
Wheeler	66.05	Kimball	22.06	Otoe	21.93	Dakota	50.70	Sarpy	75.14
Banner	63.62	Banner	10.73	Lincoln	21.63	Colfax	40.80	Blaine	39.39
McPherson	62.82	Hayes	5.12	Gosper	12.48	Dawson	39.49	Loup	32.27
Arthur	61.54	Cheyenne	4.88*	Fillmore	12.39	Stanton	34.45	Hooker	31.91
Dundy	59.55	Red Willow	4.85	Thomas	11.71	Saline	34.07	Thomas	27.81
Perkins	57.65	Hitchcock	4.75	Merrick	11.01	Platte	30.07	Dawes	27.05
Gosper	55.44	Cass	3.61	Washington	10.31	Dodge	28.63	Lancaster	25.31
Pierce	53.27	Morrill	2.50	Keya Paha	9.76	Buffalo	23.43	Wayne	24.86
Frontier	51.40	Saunders	2.30	Boyd	9.01	Hall	23.04	Gage	24.22
Hayes	51.21	Platte	1.30	Garfield	8.54	Johnson	23.04	Platte	23.45
Nebraska	8.88	Nebraska	0.40	Nebraska	7.25	Nebraska	15.93	Nebraska	17.56
United States	2.33	United States	1.52	United States	5.94	United States	26.14	United States	17.07

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*Based on two years of data.

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Table 2

RANKING OF NEBRASKA COUNTIES WITH RELATIVELY HIGHEST PORTION OF EARNINGS FROM TRANSPORTATION, COMMUNICATION, AND PUBLIC UTILITIES; WHOLESALE TRADE; RETAIL TRADE; FINANCE, INSURANCE, REAL ESTATE; AND SERVICES SECTORS: 1976-1978

Transportation Communication, and Public Utilities		Wholesale Trade		Retail Trade		Finance, Insurance, and Real Estate		Services	
County	Percent of Earnings	County	Percent of Earnings	County	Percent of Earnings	County	Percent of Earnings	County	Percent of Earnings
Lincoln	25.43	Merrick	15.76	Thomas	19.89	Douglas	10.11	Garfield	25.33
Box Butte	20.91	Rock	15.55	Sheridan	16.83	Lancaster	8.23	Thurston	21.70
Dawes	14.54	Chase	12.02	Keith	16.25	Seward	7.33	Seward	20.78
Cheyenne	14.43	York	11.35	Blaine	16.19	Cass	5.30	Douglas	18.62
Douglas	13.65	Clay	11.02	Valley	16.04	Cherry	5.12	Keith	16.93
Jefferson	13.29	Phelps	10.96	Dawes	15.80	Phelps	5.06	Washington	16.80
Rock	11.99	Howard	10.88	Hall	14.91	Blaine*	4.91	Phelps	16.33
Scotts Bluff	11.69	Antelope	10.73	Grant	14.69	Chase	4.81	Scotts Bluff	16.15
Cass	10.70	Douglas	10.54	Brown	14.62	Merrick	4.77	Dawes	16.00
Red Willow	9.80	Hall	10.53	Wayne	14.60	Hall	4.54	Adams	15.47
Nebraska	9.74	Nebraska	8.09	Nebraska	10.76	Nebraska	6.52	Nebraska	14.53
United States	7.58	United States	6.58	United States	10.10	United States	5.66	United States	16.68

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*Based on two years of data.

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

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(Continued from page 1)

from each of the ten sectors used in the compilation of personal earnings. Sectoral earnings for the counties listed in these tables are expressed as percentages of total earnings in a county. As a result, they measure the relative size within a county, and not the absolute size of the sector. Included in these tables, for comparison purposes, are the earnings ratios for the state and the United States.

There is no particular reason for ranking only the top ten counties other than convenience. Since only ten counties are listed, it must be remembered that the difference between the tenth and eleventh ranked county may be relatively small. It would have been interesting to list the lowest ranking counties, too, but many Nebraska counties have so few businesses that BEA does not disclose information for some sectors because of confidentiality considerations. Therefore, the necessary statistics could not be computed.

The first sector listed in Table 1 is the farm sector. As mentioned earlier, the majority of Nebraska's counties depend heavily on this sector. The ten counties with the highest percent of earnings from this sector are all sparsely populated, rural counties with no communities larger than 2,500; and, with the exception of Pierce County, are concentrated in the western portion of the state. Furthermore, at least half of their earnings come from this sector.

Mining was not a major industry for any county. For some western Nebraska counties with oil and gas production, however, mining was a sizable income producer. For example, Kimball County received 22 percent of its earnings from mining and Banner received nearly 11 percent. Cass, Saunders, and Platte counties earned their mining incomes from sand and gravel operations.

The construction of several large electrical power plants was a major feature of Nebraska's construction industry. Two counties heavily dependent on this type of construction were Otoe and Lincoln, as one-fifth of their earnings came from this sector. It is unlikely that this sector will retain its relative importance in these two counties or in the state after the completion of the power plants. The remaining counties received between 8.5 and 12.5 percent of their earnings from construction. They were spread throughout the state and generally had small populations.

Figure 1 indicated that in thirteen counties manufacturing was the dominant industry. Eight of these counties also ranked in the top ten for the state. In Stanton and Johnson counties, agriculture was still the primary industry even though they had relatively large manufacturing sectors. Dakota County, with its large meat packing plant, led the state with an earnings ratio of 50.7 percent.

The government sector contains the county which was most dependent on any one sector. More than three-fourths of Sarpy County's earnings originated from government, due to the presence of Offut. Dawes, Lancaster, Wayne, and Gage counties contain state institutions, while the remaining counties were more dependent on local government.

Table 2 contains the five industries which comprise the distributive sector of the state. Together they accounted for one-half of Nebraska's total earnings. The first column in this table indicates the importance of Nebraska as a rail transportation center. This is evidenced by the fact that transportation, communication, and public utilities (TCU) was a significant source of earnings for several Nebraska counties. In Lincoln and Box Butte counties, it was their primary source. The counties with large TCU sectors generally lie along the routes of Nebraska's two major railroads–Union Pacific and Burlington Northern–and are among the state's most populous counties.

Because wholesale trade includes the sale of farm machinery and equipment and other farm supplies, the counties with large portions of earnings from this sector typically lie in rural areas, with agriculture as the primary industry. Douglas County was the only county in this group whose sales principally would be to retailers, businesses, or industries rather than to agriculture.

It is interesting to note that Thomas County received nearly 20 percent of its earnings from retail trade. In fact, most of the ten highest counties are located in the rural areas of western and central Nebraska, with agriculture or government as their primary industry. It might be expected that retail sales would be more important in the larger urban counties. These counties do have large retail sectors, but they were relatively less important because of their diverse economies.

Finance, insurance, and real estate (FIRE) was dominated by the state's two largest counties, Douglas and Lancaster. The FIRE sector contained some of the lowest earnings ratios of all the sectors. Based on these ratios, FIRE was most important to Douglas (10.11 percent), Lancaster (8.23 percent), and Seward (7.33 percent) counties. The extent of the dominance of this sector by these large counties is indicated by the fact that the remaining seven counties all had relative earnings which were less than the state average.

The final distributive sector, services, was the third largest sector in the state, but, as indicated earlier, it was the principal sector in just three counties. Counties in this group were not concentrated in any area of the state, and most contained a city which is included among the state's principal business centers.

PER CAPITA INCOMES

Comparison of the relative levels of economic well-being at the county level can best be achieved by analyzing the levels of per capita personal income. As was the case for earnings, this analysis will use the averages of the years 1976 through 1978 to eliminate some of the volatility inherent in county personal income series.

Over the period 1976-1978, per capita personal income for the state averaged $6,758, compared to the national average of $7,093. Nebraska counties exhibited a wide variation in per capita incomes, ranging from 55 percent below to 40 percent above the state average. Fourteen counties equaled or exceeded the national average, while twenty-two equaled or exceeded the state average.

Figure 2 (p. 6) illustrates the dispersion among Nebraska counties. As is shown on this map, twenty-two of the counties had per capita incomes equal to or exceeding the state average, twenty-five were in the range of 90.0 to 99.9 percent of the state average, twenty-seven fell in the 80.0 to 89.9 percent range, and nineteen counties had per capita incomes which were less than 80 percent of the state average.

Comparing Figure 2 to Figure 1, it can be seen that counties with higher per capita personal incomes were more likely to have a nonagricultural sector as their main industry compared to the lower income counties. Furthermore, in the higher income counties, the main nonagricultural sector was likely to be manufacturing, while in the lower income counties

(Continued on page 6)

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Review and Outlook

The Nebraska economy improved significantly in July, with all sectors, save government and manufacturing, recording an increase in output. The state's physical volume index was 2.4% higher in July compared to the month-previous reading. Comparable statistics for the United States indicate that economic activity was unchanged in July compared to June readings.

The July reading of the Bureau of Business Research's economic index is the first break in the downward spiral from March 1980. The index peaked in May 1979 and has moved generally downward since that point. The July reading suggests that economic difficulties facing the state have at least temporarily been sidetracked. Improvements in commodity prices since July imply a continuation of the uptrend during the last half of 1980.

A review of the major sectors indicates that agriculture recorded a 6.5% advance over June, while the nonagriculture sector recorded a 1.8% increase in July. For the nonagriculture component of the state's economy, this marked the first increase in the index since December 1979.

Components of the nonagriculture increase included construction, which was up 4.4% above month-earlier levels. This improvement represents the first increase since May 1979.

The manufacturing index was unchanged in July. It peaked in February and declined through June. The unchanged reading in July suggests that the slide may be completed in this sector.

The distributive trade recorded (Continued on page 5)

Notes for Tables 1 and 2: (1) The "distributive" indicator represents a composite of wholesale and retail trade; transportation, communication and utilities; finance, insurance, and real estate; and selected services. (2) The "physical volume" indicator and its components represent the dollar volume indicator and its components adjusted for price changes using appropriate price indexes—see Table 5, page 5.

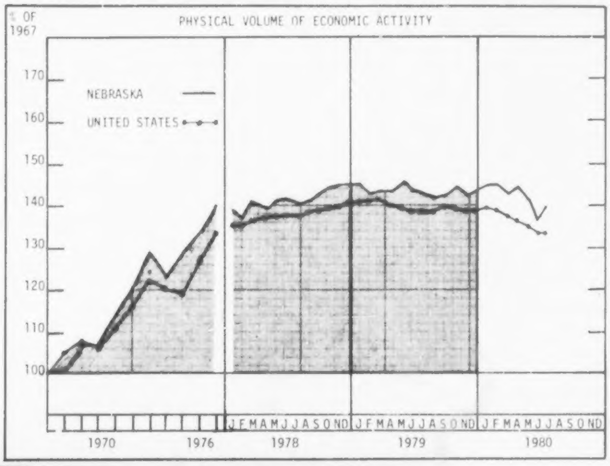
ECONOMIC INDICATORS: NEBRASKA AND UNITED STATES

1. CHANGE FROM PREVIOUS YEAR

July 1980	Current Month as Percent of Same Month Previous Year		1980 Year to Date as Percent of 1979 Year to Date	
Indicator	Nebraska	U.S.	Nebraska	U.S.
Dollar Volume	106.8	106.7	107.4	109.3
Agricultural	129.3	109.8	113.8	105.2
Nonagricultural	103.8	106.6	106.5	109.4
Construction	70.5	92.8	74.0	104.9
Manufacturing	105.9	104.1	113.6	110.6
Distributive	106.3	109.0	108.0	109.8
Government	102.4	107.1	102.4	106.8
Physical Volume	96.3	95.6	97.5	97.3
Agricultural	125.2	108.4	117.7	109.1
Nonagricultural	93.0	95.2	95.1	96.9
Construction	64.1	84.3	66.6	94.4
Manufacturing	93.6	91.1	100.3	96.1
Distributive	93.9	96.3	94.7	96.2
Government	97.5	103.4	97.9	102.6

2. CHANGE FROM 1967

Indicator	Percent of 1967 Average	
	Nebraska	U.S.
Dollar Volume	336.3	314.8
Agricultural	358.2	335.2
Nonagricultural	332.8	314.2
Construction	215.4	285.3
Manufacturing	346.2	277.2
Distributive	350.0	339.3
Government	301.2	306.5
Physical Volume	139.7	133.6
Agricultural	141.6	137.9
Nonagricultural	139.3	133.4
Construction	72.5	96.1
Manufacturing	159.8	126.0
Distributive	141.2	136.9
Government	135.4	150.4

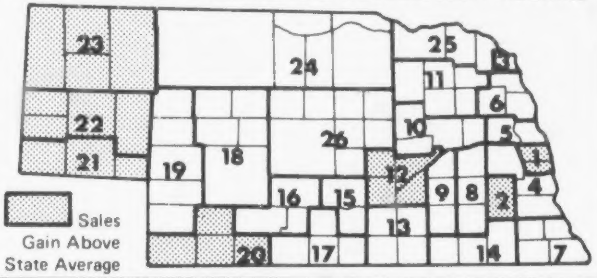


3. NET TAXABLE RETAIL SALES OF NEBRASKA REGIONS AND CITIES (Adjusted for Price Changes)

Region Number and City	City Sales* July 1980 as percent of July 1979	Sales in Region* July 1980 as percent of July 1979	Sales in Region* Year to date'80 as percent of Year to date'79
The State	95.5	93.7	89.9
1 Omaha	95.1	95.5	90.5
Bellevue	107.9		
2 Lincoln	95.6	94.7	90.9
3 So. Sioux City	96.1	92.6	88.3
4 Nebraska City	99.1	87.8	83.0
5 Fremont	100.3	95.9	84.3
Blair	100.0		
6 West Point	93.1	84.8	79.7
7 Falls City	96.3	89.0	85.7
8 Seward	93.8	89.9	84.6
9 York	100.5	93.7	86.7
10 Columbus	91.7	86.5	85.8
11 Norfolk	91.0	82.5	83.9
Wayne	86.3		
12 Grand Island	106.1	104.2	88.7
13 Hastings	89.6	91.1	87.3
14 Beatrice	94.0	91.1	87.0
Fairbury	93.6		
15 Kearney	100.5	97.9	87.3
16 Lexington	90.2	90.6	88.1
17 Holdrege	106.8	96.4	88.3
18 North Platte	93.7	90.4	83.6
19 Ogallala	88.6	89.9	85.6
20 McCook	103.6	102.4	90.7
21 Sidney	92.9	101.3	96.7
Kimball	129.0		
22 Scottsbluff/Gering	89.4	88.1	90.0
23 Alliance	91.5	95.2	90.6
Chadron	99.8		
24 O'Neill	90.0	87.9	84.2
25 Hartington	82.3	79.6	81.3
26 Broken Bow	87.8	87.7	86.6

*State totals include sales not allocated to cities or regions. The year to year ratios for city and region sales may be misleading because of changes in the portion of unallocated sales. Region totals include, and city totals exclude, motor vehicle sales. Sales are those on which sales taxes are collected by retailers located in the state. Compiled from data provided by Nebraska Department of Revenue.

1980 YEAR TO DATE AS PERCENT OF 1979 YEAR TO DATE IN NEBRASKA'S PLANNING AND DEVELOPMENT REGIONS



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(Continued from page 4) a 3.4% increase in July, which represents the first increase for this sector since December 1979. This sector has been declining since reaching a peak in May of 1979. The decline in the distributive trade reflects the battering real disposable personal income has taken during the past two years. Consumers' real income has declined primarily because of high rates of inflation but also due to lagging gains in personal income. As a consequence, consumers have less capacity to increase real purchases.

Only the government sector declined in July, recording a decrease in the fiscal volume index of 2.9%. The public sector peaked in August 1978 and has been slowly declining since.

The improvement in the state's economic picture was directly linked to an improving agriculture sector. Cash farm marketings increased $136 million on a seasonally adjusted basis during July 1980. On a year-to-year basis, cash farm marketings were up $167 million compared to the same month in 1979, or nearly 47% higher than year-earlier levels. Prices received by the farmers were up more than 3% in July above year-previous levels, but prices paid by farmers were up even more at 11.1%.

Employment in Nebraska was estimated at 766,000, down 9,000 from June 1980. On a yearly basis, employment was down approximately 10,000 persons when compared with July 1979. While employment was down in July compared to June, unemployment decreased to 4% of the labor force because of a decline in labor force size. Unemployment in June was 4% compared with 2.8% in July of 1979. Employment lags overall economic trends, so improvements in this statistic will require another two or three months. Assuming the recession is over, gains in employment should develop during the third quarter of 1980.

July was a better month for retail sales in Nebraska and the United States than the months immediately preceding it. On a dollar volume basis, retail sales nationally were up 3.2% above the June level. In Nebraska the increase in retail sales was 16.1% above the June level. Part of the increase reflects the depressed nature of retail sales since March of 1980, but undoubtedly some of the gain reflects strength in the national economy.

Data in Table 3 indicate city and region real retail sales. Notable increases were recorded in Kimball, Bellevue, Grand Island, Holdrege, and McCook. Caution is advised in interpreting these statistics, for the single monthly observation may distort results.

The effects of the slowdown in economic activity are reflected in the city business indexes, as twenty-one of the twenty-six reporting cities recorded losses in July 1980 relative to year-previous levels. York, Grand Island, Bellevue, South Sioux City, and Nebraska City all recorded increases in local economic activity on a July-to-July basis.

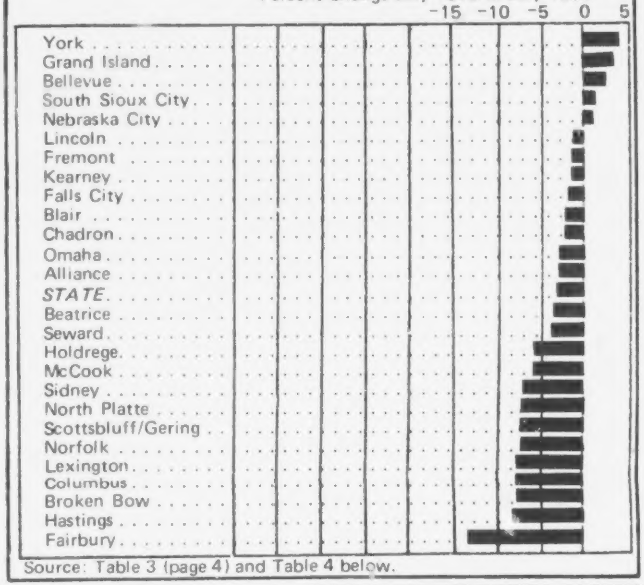
D. E. P.

5. PRICE INDEXES

July 1980	Index (1967 = 100)	Percent of Same Month Last Year	Year to Date as Percent of Same Period Last Year*
Consumer Prices	247.8	113.2	114.2
Commodity component	234.1	111.2	112.7
Wholesale Prices	269.8	113.9	114.5
Agricultural Prices			
United States	243.0	101.2	96.5
Nebraska	253.0	103.3	96.8

*Using arithmetic average of monthly indexes.
Sources: Consumer and Wholesale Prices: U.S. Bureau of Labor Statistics; Agricultural Prices: U.S. Department of Agriculture.

CITY BUSINESS INDEXES
Percent Change July 1979 to July 1980



Source: Table 3 (page 4) and Table 4 below.

4. JULY CITY BUSINESS INDICATORS

The State and Its Trading Centers	Percent of Same Month a Year Ago: Employment[1]	Building Activity[2]	Power Consumption[3]
The State	99.5	65.5	107.2
Alliance	101.8	79.4	106.9
Beatrice	100.7	65.9	103.6
Bellevue	99.9	65.4	114.3
Blair	97.6	52.4	115.6
Broken Bow	99.3	38.8	137.1
Chadron	99.5	54.1	106.3
Columbus	96.9	47.4	100.5
Fairbury	98.0	7.6	105.2
Falls City	99.9	47.6	129.4
Fremont	98.2	48.1	125.2*
Grand Island	99.6	105.2	109.7
Hastings	98.3	39.1	108.6
Holdrege	98.5	19.2	92.5
Kearney	99.5	61.9	106.8
Lexington	97.0	38.2	117.3
Lincoln	103.6	71.5	106.7
McCook	97.7	21.1	104.2
Nebraska City	98.8	81.3	124.8
Norfolk	98.5	51.4	100.2
North Platte	99.3	36.8	101.7
Omaha	99.9	66.7	108.1
Scottsbluff/Gering	97.2	73.6	96.4
Seward	97.9	67.7	108.5
Sidney	98.5	38.5	108.2
So. Sioux City	100.4	159.4	103.0
York	98.7	231.0	107.6

[1] As a proxy for city employment, total employment for the county in which a city is located is used.

[2] Building Activity is the value of building permits issued as spread over an appropriate time period of construction. The U.S. Department of Commerce Composite Construction Cost Index is used to adjust construction activity for price changes.

[3] Power Consumption is a combined index of consumption of electricity and natural gas except in cases marked * for which only one is used.

Source: Compilation by Bureau of Business Research from reports of private and public agencies.

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it was likely to be government. In sum, twenty of forty-seven counties in the two higher income groups were more dependent on nonagricultural industries, but this was the case in only ten of forty-six counties in the two lower income groups.

CONCLUSION

The preceding sections of this article have attempted to provide a brief review of the structure and character of the economies of Nebraska's counties during the period 1976-1978. To accomplish this task, attention primarily was focused on personal earnings data because personal income data are not available by sector on a county basis. Two main sources of income (transfer payments and property income), however, are excluded from earnings data. As a result, the earnings ratios presented in this article will tend to overstate the relative importance of the sectors in relation to the total personal income of the county.

Additionally, the analysis in this article looked only at a county's economy during a specific time period, 1976-1978. Articles in previous issues of *Business in Nebraska* have shown that the structure of the Nebraska economy has been (and is still) changing. The extent to which this transition has carried over to Nebraska's counties has not been addressed in this article.

Data from ten years earlier reveal that there have been some changes in primary sources of income in Nebraska counties. During the period 1966-1968, government was the primary source of earnings for the state. The principal sectors and the number of counties in which they were the primary sources of earnings are presented below:

Sector	No. of Counties
(1) Farming	76
(2) Manufacturing	6
(3) Retail Trade	6
(4) Government	5
(5) TCU	1

When compared to the 1976-1978 data, these figures do seem to indicate some tendency for changes in the state economy to spread throughout the state. Despite these changes, agriculture has remained the primary industry in most Nebraska counties, and the other economic sectors continue to rely on agricultural production for raw materials and on agricultural income for a substantial share of their markets.

J. A. D.

Fig. 1 PRIMARY SOURCES OF EARNING FOR COUNTIES 1976-1978 AVERAGE

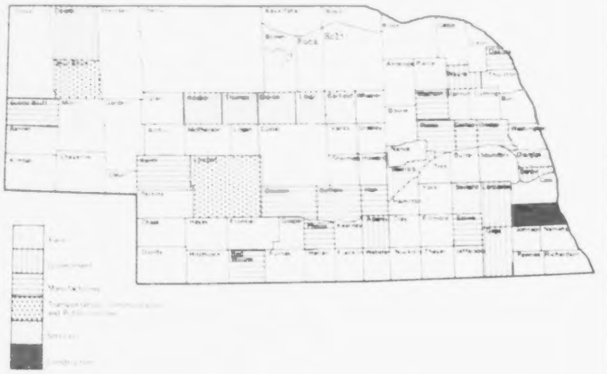
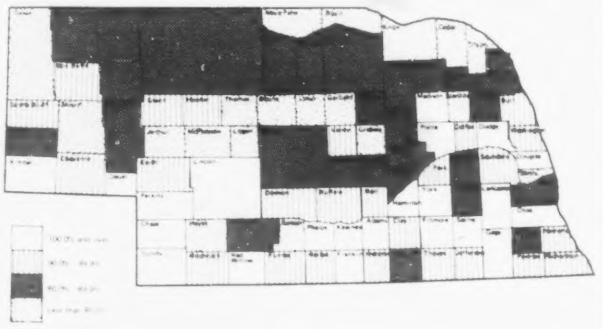


Fig. 2 COUNTY PER CAPITA PERSONAL INCOME AS A PERCENT OF STATE 1976-1978 AVERAGE



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ANALYSIS OF CHANGES IN NET TAXABLE RETAIL SALES, 1970-1979

This article analyzes and describes the changes which have occurred in the level of Nebraska's retail sales from 1970 to 1979. Comparisons are made of the regional and county shares of the state's retail sales with the regional and county shares of population and personal income.

Net taxable retail sales for the state were $8,733 million in 1979. This represents a 164% increase over the $3,303 million recorded in 1970, or an average annual rate of 11.4% (see Table 1).

Much of this increase, however, is due to inflation as evidenced by the commodities component of the Consumer Price Index, which rose 83.6% or at an annual rate of 7.4% from 1970 to 1979. Comparison of 1970 census data with advance census totals for 1980 indicates an increase in population for the state of 3.6%, an average annual rate of less than 0.5%. Total personal income increased 113% in Nebraska from 1970 to 1978 (1979 data are not yet available), with per capita personal income up by 102%. Therefore, not only were more people buying goods at higher prices, but in general there was more income per person available for the purchase of more goods. Thus, the absolute level of goods purchased per person rose in the period 1970 to 1979.

The metropolitan areas comprising Douglas, Lancaster, Dakota, and Sarpy counties generate nearly half the state's retail sales. The contribution of these areas to the total has fallen from 48.4% in 1970 to 45.0% in 1979. To obtain a clearer perspective of the changes in sales, it is worthwhile to compare the changes occurring in metropolitan areas with those occurring in nonmetropolitan areas (see Table 1). Note that the 1979, 1978, and 1977 state totals have been reduced by $479.5 million, $438.9 million, and $408.0 million, respectively, as these amounts cannot be allocated to any particular counties.

Based on these figures, the increase in state retail sales for 1970-1979 was 150% in current dollars and 36% in constant dollars. For the same period, sales increases in the metropolitan areas were 133% and 27%, respectively, while nonmetropolitan areas showed a 166% increase in current dollars and 45% in constant dollars. Over this period, the nonmetropolitan areas have outperformed the metropolitan areas in average growth per year in both current and constant dollars. The average yearly growth in current dollars for metropolitan areas for the 1970-79 period was 9.9%, compared to 11.6% for the nonmetropolitan areas. In constant dollars, the retail sales growth in metropolitan areas averaged 2.8%, compared with 4.3% for nonmetropolitan areas.

Bringing the analysis down to the level of individual counties indicates that fourteen counties achieved 200% or better increases in retail sales in the 1970 to 1979 period (see Table 2, p. 2). In counties with populations in excess of 20,000 (excluding Lancaster and Douglas counties), Buffalo with 203% and Madison with 200% performed considerably better than the 173% average growth for counties of this size. Box Butte with 235%, Holt with 221%, and Cuming with 205% led those counties with populations between 10,000 and 20,000. Average growth rate in this classification was 158%.

(Continued on page 3)

Table 1
NET TAXABLE RETAIL SALES IN NEBRASKA 1970-1979
WITH PERCENTAGE CHANGES IN SALES UNADJUSTED AND ADJUSTED FOR PRICE CHANGES

	Unadjusted for Price Changes (Thousands of Dollars)						Adjusted for Price Changes (% Change)		
	State	% Change	Metropolitan	% Change	Nonmetropolitan	% Change	State	Metropolitan	Nonmetropolitan
1970	3303.4	---	1597.7	---	1705.7	---	---	---	---
1971	3603.7	9.1	1751.6	9.6	1851.1	8.5	5.5	6.1	4.9
1972	4020.3	11.6	1963.8	12.1	2056.5	11.1	8.3	8.8	7.9
1973	4668.3	16.1	2181.6	11.1	2486.7	20.9	7.7	3.4	12.5
1974	5227.6	12.0	2388.9	9.5	2838.7	14.2	0.0	−2.2	1.9
1975	5579.5	6.7	2512.8	5.2	3066.7	8.0	−2.1	−3.4	−0.8
1976	6354.5	13.9	2829.1	12.6	3525.4	15.0	9.2	7.9	10.2
1977	7019.7	10.5	3065.4	8.4	3546.3	0.6	−1.6	2.5	−4.8
1978	7801.2	11.1	3395.6	10.8	3966.7	11.9	3.8	3.4	4.4
1979	8733.5	12.0	3718.1	9.5	4535.9	14.3	0.5	−1.7	2.7
Average Increase:		11.4		9.9		11.6	3.5	2.8	4.3

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Table 2

NET TAXABLE RETAIL SALES IN NEBRASKA, 1970 AND 1979 WITH RATIOS OF RETAIL SALES ANALYSIS, 1970 AND 1978

Region and County	Thousands of Dollars		Percent of Change	Ratio of the Share of State Retail Sales			
	1970	1979		To Share of 1970 State Population	To Share of 1970 State Personal Income	To Share of 1978 State Population	To Share of 1978 State Personal Income
Region 1	1170.6	2649.1	126	115	102	104	102
Douglas	1099.2	2473.5	125	127	108	117	109
Sarpy	71.4	175.6	146	49	54	42	54
Region 2	399.2	1010.8	153	107	96	104	94
Lancaster	399.2	1010.8	153	107	96	104	94
Region 3	27.9	58.2	109	96	105	72	83
Dakota	27.9	58.2	109	96	105	72	83
Region 4	85.8	200.2	133	77	81	71	75
Cass	24.4	55.4	127	61	66	53	59
Otoe	33.8	77.9	130	97	98	100	98
Saunders	27.6	66.9	142	73	84	69	75
Region 5	108.2	268.6	148	103	100	103	100
Dodge	84.2	208.8	148	109	104	111	105
Washington	24.0	59.8	149	81	82	76	80
Region 6	43.9	114.9	162	68	87	78	88
Burt	15.9	39.8	150	78	86	85	88
Cuming	19.5	59.5	205	73	98	91	106
Thurston	8.5	15.6	84	55	69	42	51
Region 7	53.6	114.5	114	76	80	78	82
Johnson	8.7	20.2	132	69	80	72	81
Nemaha	15.9	32.4	104	79	81	78	82
Pawnee	5.3	12.1	128	53	62	59	59
Richardson	23.7	49.8	110	87	90	85	89
Region 8	62.1	158.3	155	76	86	79	86
Butler	13.0	31.9	145	62	72	66	72
Seward	25.0	63.2	153	78	93	77	93
Saline	24.1	63.2	162	85	89	92	87
Region 9	57.6	159.9	178	90	94	106	100
Fillmore	15.8	41.1	160	88	82	95	84
Polk	9.0	27.3	203	62	73	80	78
York	32.8	91.5	179	108	112	117	115
Region 10	103.0	279.5	171	94	100	103	97
Boone	15.1	37.4	148	83	118	90	92
Colfax	18.1	46.8	159	86	96	88	91
Nance	6.5	15.3	135	57	76	61	73
Platte	63.3	180.0	184	107	100	117	103
Region 11	117.7	345.4	193	88	113	103	100
Antelope	14.2	36.5	157	71	98	74	77
Madison	73.7	221.3	200	121	131	139	123
Pierce	10.6	30.5	188	56	90	67	71
Stanton	4.9	12.5	155	38	67	39	42
Wayne	14.3	44.6	212	62	91	85	100
Region 12	163.6	463.3	183	111	114	122	125
Hall	124.4	362.0	191	130	127	156	150
Hamilton	14.5	38.4	165	73	77	80	72
Howard	9.7	26.4	172	64	75	69	77
Merrick	15.0	36.5	143	77	87	76	89
Region 13	114.1	278.8	144	100	100	106	100
Adams	78.5	189.8	142	115	109	123	107
Clay	13.0	35.5	173	70	67	85	82
Nuckolls	14.1	34.5	145	86	106	96	110
Webster	8.5	19.0	124	71	84	71	72
Region 14	83.4	198.5	138	83	96	92	92
Gage	46.4	113.3	144	81	89	92	88
Jefferson	22.8	51.2	125	99	113	97	104
Thayer	14.2	34.0	139	82	94	81	81
Region 15	80.8	240.9	198	92	104	112	112
Buffalo	69.2	209.9	203	100	119	115	124
Kearney	11.6	31.0	167	78	70	87	69
Region 16	55.0	153.7	179	100	100	100	106
Dawson	47.3	133.0	181	107	105	112	120
Frontier	4.6	11.6	152	52	61	49	54
Gosper	3.1	9.1	194	63	71	62	71
Region 17	51.7	131.4	154	94	100	100	94
Franklin	7.7	18.0	134	75	75	75	72
Furnas	12.1	27.1	124	79	91	76	78
Harlan	7.3	18.1	148	75	79	74	77
Phelps	24.6	68.2	177	115	114	131	124
Region 18	77.8	227.9	193	109	114	104	108
Hooker	1.8	4.1	128	90	99	70	76
Lincoln	72.8	216.2	197	110	113	110	111
Logan	1.1	2.2	100	50	63	41	48
McPherson	0.3	1.0	233	23	24	24	31
Thomas	1.8	4.4	144	81	110	72	96
Region 19	40.9	122.8	200	100	100	108	100
Arthur	0.5	1.3	160	37	68	47	46
Chase	9.6	31.4	227	105	113	120	109
Grant	2.0	3.7	85	90	80	74	79
Keith	21.7	64.7	198	115	118	119	124
Perkins	7.1	21.7	206	94	82	115	79
Region 20	45.9	115.0	151	100	108	93	93
Dundy	4.8	11.4	138	74	82	80	64
Hayes	0.9	2.5	178	27	35	25	38
Hitchcock	4.8	10.1	110	53	61	46	47
Red Willow	35.4	91.0	157	131	139	129	131
Region 21	42.4	95.4	125	100	108	100	100
Cheyenne	21.9	49.4	126	91	106	89	99
Deuel	5.3	11.4	115	88	72	84	70
Kimball	15.2	34.6	128	114	121	124	114
Region 22	101.6	270.6	166	100	111	107	119
Banner	0.5	1.7	240	22	24	31	36
Garden	4.6	11.4	148	71	82	75	82
Morrill	10.5	32.7	211	81	110	97	121
Scotts Bluff	86.0	224.8	161	106	115	112	121
Region 23	58.3	169.4	191	90	106	100	118
Box Butte	22.2	74.3	235	99	106	112	125
Dawes	17.8	47.4	166	82	100	97	120
Sheridan	17.0	44.1	149	105	118	110	126
Sioux	1.3	3.6	177	29	45	34	60
Region 24	57.6	173.5	201	81	100	100	118
Boyd	5.0	11.5	130	59	85	61	82
Brown	9.0	26.7	197	101	104	111	120
Cherry	13.5	36.9	173	89	97	99	105
Holt	24.3	77.9	221	85	117	104	121
Keya Paha	1.2	2.9	142	42	51	39	64
Rock	4.6	17.6	283	94	122	118	126
Region 25	41.7	108.7	161	62	93	68	87
Cedar	16.8	45.7	172	62	105	74	90
Dixon	7.8	17.0	118	47	62	47	57
Knox	17.1	46.0	169	66	100	75	96
Region 26	59.0	144.7	145	78	90	76	84
Blaine	0.9	2.2	144	61	62	45	65
Custer	27.6	68.5	148	88	91	87	93
Garfield	4.5	12.0	167	84	106	83	108
Greeley	5.6	12.2	118	63	82	57	67
Loup	0.6	1.7	183	30	41	31	58
Sherman	6.6	15.6	136	63	80	66	72
Valley	12.4	29.8	140	96	112	104	109
Wheeler	0.8	2.7	238	33	57	49	46
State Total:	3303.4	8254.0	150	---	---	---	---

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(Continued from page 1)

Counties with populations between 5,000 and 10,000 averaged 156% growth in retail sales. Notable performers were Wayne with 212%, Morrill with 211%, and Polk with 203%. Chase with 227% and Perkins with 206% well exceeded the average growth rate of 150% for counties with populations between 2,500 and 5,000. The average growth rate in retail sales for counties with populations less than 2,500 was 170%. Significant gainers in this classification included Rock with 283%, Banner with 240%, Wheeler with 238%, and McPherson with 233%.

While it is interesting to consider and compare the growth rates of retail sales in counties, it is their drawing power as trade centers, in terms of their sales shares versus their population and personal income shares, that this article focuses upon. (This method has been used in the past to analyze both regions within the state and individual trade centers. See articles by Edward L. Hauswald in *Business in Nebraska,* September 1969 and October 1970.)

A county's retail trade position can be determined as a ratio of (1) the county's dollar volume of retail sales as a percentage of the state's retail sales to (2) the county's population as a percentage of the state's population and to (3) the county's personal income as a percentage of the state's personal income. For example, a county with 4% of the state's retail sales and 2% of the state's population would have a sales-share/population-share ratio of 200, and a county with 3% of the state's retail sales and 4% of the state's personal income would have a sales-share/income-share ratio of 75.

If the ratios of sales share to population share and income share exceed 100, it may be reasonable to assume that retail sales are being generated through the attraction of additional consumers, or personal income, or some combination of the two.

Some important possibilities are:

1. If a county's sales share is equal to its population and income shares, then both the sales-share/population-share and sales-share/income-share ratios are 100. Such a county would have zero drawing power, with sales activity equal to its local potential.
2. If a county's sales share is greater than both its population and income shares, both ratios will exceed 100. This county has positive drawing power, with sales activity greater than the local potentials from both population and income. Additional consumers and personal income have been attracted to the county.
3. If a county's sales share is less than both its population and income shares, both ratios will be less than 100. The county has negative drawing power, with sales activity less than the local potentials from both population and income. Consumers and personal income have been drawn out of the county.
4. If a county's sales share is greater than its population share but less than its income share, the county has positive drawing power but its sales activity is less than its local potential from income.
5. If a county's sales share is greater than its income share but less than its population share, the county has positive drawing power but its sales activity is less than its local potential from population.

Table 2 presents the sales-share/population-share and sales-share/personal-income share ratios by regions and by counties for 1970 and 1978. Five regions produced both indexes in excess of 100 in 1978, indicating positive drawing power in that they drew additional consumers and additional personal income over and above their respective local potentials. Region 12 (Hall, Howard, Merrick, and Hamilton) had the highest indexes for each ratio, notably 122% for sales-share/population-share and 125% for sales-share/personal income-share. This may be interpreted as Region 12's share of sales is 22 percentage points higher than its share of the state's population and 25 percentage points higher than its share of the state's personal income. Region 15 (Buffalo and Kearney), Region 22 (Scotts Bluff, Banner, Morrill, and Garden), Region 18 (Lincoln, McPherson, Hooker, Thomas, and Logan), and Region 1 (Douglas and Sarpy) completed the top five regions. There is some significance to the fact that these regions all lie along the Platte River-Interstate 80 route, and that this is the belt of population concentration in the state.

In analyzing the situation from the perspective of individual counties, twenty-two counties are evidencing positive drawing power in 1978 as measured by both indexes, up from sixteen in 1970 (see Fig. 1 and Fig. 2, p. 6). Hall County generates by far the most drawing power, as witnessed by a 156% index for sales-share/population-share and 150% index for sales-share/personal income share. These indexes, when compared with the 1970 figures of 130 and 127, respectively, indicate that Hall County is continuing to grow as a major retail trade center and is attracting consumers and personal income from other counties at an increasing rate. Other counties registering evidence of very high drawing power are Madison, 139 and 123; Red Willow, 129 and 131; Phelps, 131 and 124; Rock, 118 and 126; and Keith, 119 and 124. While these counties may be generating the highest drawing power, it should be noted that any county with both indexes over 100 is doing well.

Lancaster County represents a rather anomalous situation in that it has a positive rating in terms of a sales-share/population-share ratio of 104, but a sales-share/personal income-share of 94. This indicates that Lancaster County's share of the state's personal income is not matched by its share of the state's retail sales. A portion of the personal income generated in or received by those in this county appears to flow elsewhere, even though there is a net inflow of consumers as indicated by the sales-share/population-share ratio. This phenomenon is even more evident in Perkins County, where the respective ratios are 115 and 79. Perkins County has the highest per capita personal income of any county in the state but loses a considerable portion of this income to retail centers outside the county.

Not only should attention be given to the absolute level of the indexes, but also to the movement in the indexes over time. A comparison of the ratios for 1970 with those for 1978 shows that fifty-seven counties improved their sales-share/population-share ratios, while thirty-two recorded a lower ratio in 1978 than in 1970. Only thirty-eight counties were able to increase their 1978 sales-share/personal income-share ratios over their 1970 figures, while forty-nine counties recorded declines in this ratio. Of the twenty-two counties with both indexes over 100, fourteen increased both the sales-share/population-share index and sales-share/personal income-share index in the period 1970-1978. This would indicate that these counties are continuing to capture an increasing share of the retail trade

(Continued on page 6)

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Review and Outlook

Nebraska's real output was essentially unchanged in August compared to July. The physical volume index declined 0.4 percent in August following a large increase in July. Nebraska's economy remains below peak 1979 levels, but has improved somewhat from depressed second-quarter 1980 levels.

The August decrease was attributable to a decline in agriculture as a result of reduced cash farm marketing receipts. The nonagricultural sector of the Nebraska economy was unchanged on a month-to-month basis.

The agriculture sector recorded an August-to-July output decrease of 2.7 percent. On a seasonally adjusted basis, cash farm marketing receipts declined $34 million, or 5.4 percent. Nebraska went against the general trend, as U.S. cash farm marketing receipts increased. On an unadjusted basis, cash farm marketings receipts were up $120 million, reflecting seasonal variations.

Agricultural prices received in Nebraska were 8.3 percent above July levels and 12 percent above year-previous levels. Increases in prices received nearly equaled increases in prices paid, as prices paid by farmers and ranchers in August 1980 rose 12.7 percent compared to year-previous levels.

The construction sector recorded a second consecutive monthly increase. The August-to-July increase in Nebraska was up 6.8 percent. Construction activity was comparable in August to the April 1980 level, with activity in this sector up from the depressed levels of the second-quarter 1980

(Continued on page 5)

Notes for Tables 1 and 2: (1) The "distributive" indicator represents a composite of wholesale and retail trade; transportation, communication and utilities; finance, insurance, and real estate; and selected services. (2) The "physical volume" indicator and its components represent the dollar volume indicator and its components adjusted for price changes using appropriate price indexes—see Table 5, page 5.

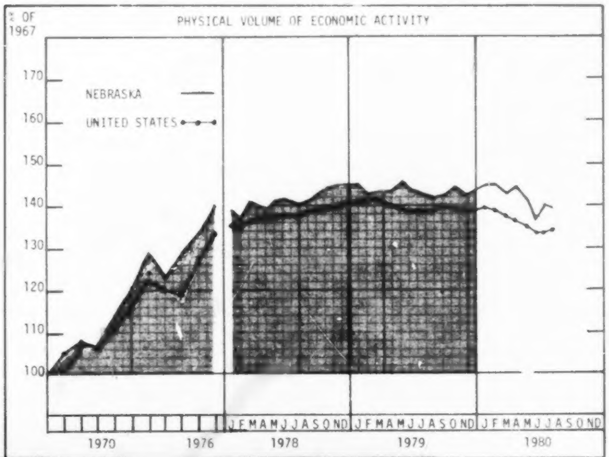
ECONOMIC INDICATORS: NEBRASKA AND UNITED STATES

1. CHANGE FROM PREVIOUS YEAR

August 1980	Current Month as Percent of Same Month Previous Year		1980 Year to Date as Percent of 1979 Year to Date	
Indicator	Nebraska	U.S.	Nebraska	U.S.
Dollar Volume	108.0	107.1	107.5	109.0
Agricultural	135.2	116.7	116.5	107.2
Nonagricultural	104.4	106.8	106.3	109.1
Construction	77.3	91.9	74.4	103.1
Manufacturing	108.2	105.7	112.9	109.9
Distributive	105.7	108.7	107.7	109.7
Government	102.6	106.9	102.7	106.8
Physical Volume	96.3	95.7	97.3	97.0
Agricultural	120.4	108.1	118.1	109.5
Nonagricultural	93.4	95.3	94.9	96.7
Construction	70.1	83.4	66.7	92.5
Manufacturing	94.6	92.4	99.6	95.6
Distributive	93.7	96.3	94.6	96.2
Government	97.4	100.8	98.1	101.9

2. CHANGE FROM 1967

Indicator	Percent of 1967 Average: Nebraska	Percent of 1967 Average: U.S.
Dollar Volume	342.5	318.7
Agricultural	379.0	345.7
Nonagricultural	336.7	317.8
Construction	230.0	283.5
Manufacturing	353.1	281.9
Distributive	350.5	343.5
Government	312.1	307.7
Physical Volume	139.5	134.0
Agricultural	138.3	133.0
Nonagricultural	139.6	134.0
Construction	76.2	93.9
Manufacturing	159.4	126.9
Distributive	140.5	137.7
Government	139.8	150.4

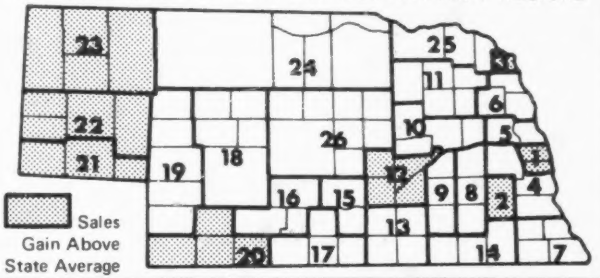


3. NET TAXABLE RETAIL SALES OF NEBRASKA REGIONS AND CITIES (Adjusted for Price Changes)

Region Number and City	City Sales*: August 1980 as percent of August 1979	Sales in Region*: August 1980 as percent of August 1979	Sales in Region*: Year to date'80 as percent of Year to date'79
The State	92.1	89.6	89.8
1 Omaha	90.6	89.5	90.4
Bellevue	91.9		
2 Lincoln	92.6	91.2	90.9
3 So. Sioux City	105.9	90.7	88.6
4 Nebraska City	95.3	80.5	82.7
5 Fremont	91.9	90.4	85.1
Blair	94.3		
6 West Point	77.7	8[illegible].5	80.0
7 Falls City	87.4	78.9	84.8
8 Seward	91.9	89.1	85.2
9 York	101.9	91.2	87.3
10 Columbus	95.0	88.9	86.1
11 Norfolk	83.8	80.3	83.4
Wayne	84.8		
12 Grand Island	105.0	99.2	90.1
13 Hastings	96.5	89.6	87.6
14 Beatrice	95.3	85.7	86.8
Fairbury	74.4		
15 Kearney	95.8	92.3	88.0
16 Lexington	90.7	86.1	87.9
17 Holdrege	94.1	89.1	88.4
18 North Platte	87.5	83.2	83.6
19 Ogallala	102.5	91.9	86.4
20 McCook	90.8	88.5	90.4
21 Sidney	85.0	92.6	96.1
Kimball	112.2		
22 Scottsbluff/Gering	94.4	92.3	90.3
23 Alliance	101.3	94.8	91.2
Chadron	96.1		
24 O'Neill	90.1	78.1	83.4
25 Hartington	79.0	76.8	80.7
26 Broken Bow	89.9	80.6	85.8

*State totals include sales not allocated to cities or regions. The year-to-year ratios for city and region sales may be misleading because of changes in the portion of unallocated sales. Region totals include, and city totals exclude, motor vehicle sales. Sales are those on which sales taxes are collected by retailers located in the state. Compiled from data provided by Nebraska Department of Revenue.

1980 YEAR TO DATE AS PERCENT OF 1979 YEAR TO DATE IN NEBRASKA'S PLANNING AND DEVELOPMENT REGIONS



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(Continued from page 4)

but still below year-previous levels.

The manufacturing sector recorded a slight decrease in output of 0.2 percent. Manufacturing activity in Nebraska peaked in the first quarter of 1980, declined in the second quarter, and seems to have stabilized during July and August. Activity in the manufacturing sector remains about 5 percent below year-earlier levels.

Nebraska's distributive trade sector recorded a decrease in output of 0.6 percent on a month-to-month basis. Change in this sector has been erratic during much of 1979 and 1980 and, similar to other sectors, is below peak 1979 levels.

The government sector recorded a 1.1 percent increase in output in August. The public sector output has changed little over the past 18 months, moving up at times and down at times. The government index for August 1980 was approximately 3 percent below year-previous levels. Spending limitations below the rate of inflation appear to be reducing the public sector's share of output, at least in Nebraska.

A comparison of Nebraska's economy in August 1980 to the 1967 base is of interest. Nebraska's physical volume output increased 39 percent from the 1967 base level. Agriculture more or less maintained pace with the total Nebraska economy, recording a 38.3 percent increase (Table 2).

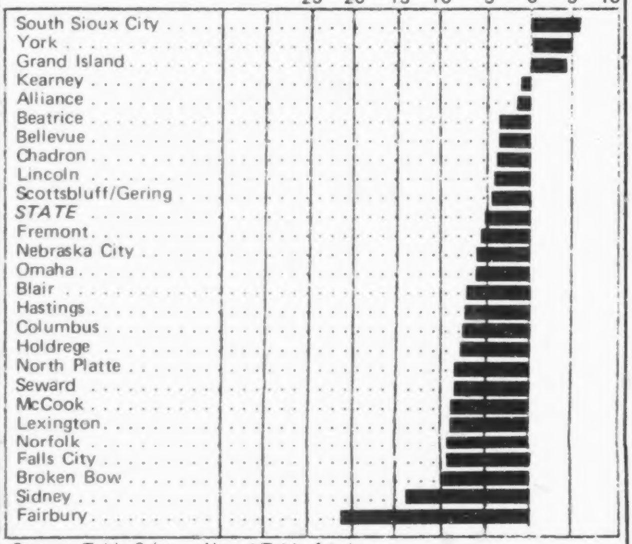
In the nonagricultural sector, manufacturing, distributive, and government sectors have recorded increases, while construction is sharply down. Manufacturing recorded the largest increase of any sector in Nebraska when compared to the 1967 base.

Nebraska's retail sales in August were unchanged from year-earlier levels. Since commodity prices increased 11.5 percent over the year, real retail sales were down about 10 percent in Nebraska. Improvements in retail sales in August compared to August 1979 were recorded in eleven of Nebraska's twenty-six regions. There seems to be a gradual improvement in retail sales spreading across a wider area of the state. On a year-to-date basis, retail sales through August 1980 were above the same period 1979 levels in seven of Nebraska's twenty-six economic regions.

Strong points in Nebraska's economy are reflected in the city business indexes at South Sioux City, York, and Grand Island. Real retail sales were notably improved in Grand Island, up 5.0 percent; Kimball, up 12.2 percent; and South Sioux City, up 5.9 percent, on an August-to-August basis. Ogallala, York, and Alliance recorded more modest increases in real retail sales on an August-to-August basis. These six cities represent the only trade center communities to record real sales gains in August.

D. E. P.

CITY BUSINESS INDEXES
Percent Change August 1979 to August 1980



Source: Table 3 (page 4) and Table 4 below.

4. AUGUST CITY BUSINESS INDICATORS

The State and Its Trading Centers	Percent of Same Month a Year Ago		
	Employment[1]	Building Activity[2]	Power Consumption[3]
The State	98.0	72.3	102.6
Alliance	99.3	70.0	95.7
Beatrice	99.0	52.5	110.2
Bellevue	97.3	75.7	113.7
Blair	96.1	65.7	85.3
Broken Bow	98.0	40.7	88.8
Chadron	97.4	73.2	95.0
Columbus	96.2	37.3	101.7
Fairbury	97.2	14.0	80.5
Falls City	98.3	23.9	122.3
Fremont	101.0	40.1	113.9*
Grand Island	97.8	142.0	119.0
Hastings	96.6	34.6	100.3
Holdrege	97.9	30.3	105.4
Kearney	101.4	71.1	111.9
Lexington	96.6	50.0	89.1
Lincoln	98.5	70.7	103.4
McCook	97.4	48.8	87.3
Nebraska City	97.6	63.6	89.3
Norfolk	97.2	57.6	104.4
North Platte	98.3	36.1	113.8
Omaha	97.3	74.0	101.9
Scottsbluff/Gering	97.7	84.6	89.9
Seward	96.9	40.6	96.6
Sidney	97.5	18.7	99.3
So. Sioux City	98.7	293.9	94.7
York	97.7	306.8	103.3

[1] As a proxy for city employment, total employment for the county in which a city is located is used.

[2] Building Activity is the value of building permits issued as spread over an appropriate time period of construction. The U.S. Department of Commerce Composite Construction Cost Index is used to adjust construction activity for price changes.

[3] Power Consumption is a combined index of consumption of electricity and natural gas except in cases marked * for which only one is used.

Source: Compilation by Bureau of Business Research from reports of private and public agencies.

5. PRICE INDEXES

August 1980	Index (1967 = 100)	Percent of Same Month Last Year	Year to Date as Percent of Same Period Last Year*
Consumer Prices	249.4	112.8	114.0
Commodity component	236.7	111.5	112.6
Wholesale Prices	273.1	114.6	114.5
Agricultural Prices			
United States	260.0	107.9	98.0
Nebraska	274.0	112.3	98.8

*Using arithmetic average of monthly indexes.

Sources: Consumer and Wholesale Prices: U.S. Bureau of Labor Statistics; Agricultural Prices: U.S. Department of Agriculture.

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(Continued from page 3)

in their areas. Counties that find themselves in the position of being able to draw additional consumers and income to their trade centers should attempt to discover the reasons why such a phenomenon is occurring. The reasons may well be unique for any particular county and should be understood so that any unforeseen changes in the conditions can be interpreted as to their likely effects on the county retail trade level.

Approximately two-thirds of the counties in the state have both indexes below 100. It is important for these counties to make comparative analyses between or among competing trade centers in an attempt to find out how to strengthen their positions. By the same token, counties that find their relative shares declining need to analyze their situation to determine why such a phenomenon is occurring and how best to combat the decline.

There are probably many conclusions that could be drawn from this analysis. It is clear that while the major metropolitan centers are responsible for a significant portion of the state's retail sales, their share is declining and strong pockets of retailing activity are emerging across the state. Particularly noteworthy is the performance of the southcentral region of the state, comprising Dawson, Buffalo, Hall, Phelps, and Adams counties. This area is developing into a particularly strong center of retail activity and appears to be attracting a considerable amount of business from the surrounding areas.

The expansion of facilities by Burlington-Northern in Box Butte County has resulted in dramatic growth in retail activity in this area. The northcentral region of the state, comprising Holt, Brown, and Rock counties, is also showing considerable strength and growth, which is possibly due in part to agricultural development and expenditures in the area. In the northeastern part of the state, Madison County continues to stand out as a major retail trade center.

The information supplied in the tables and maps in this article provides a base from which counties can determine their relative position to that of competing counties. Obviously, a more sophisticated investigation of retail trade is needed to answer questions such as why some counties continually outperform others, why some counties are experiencing growth while others are declining in their shares of retail trade, and so on. Such an analysis will be forthcoming in a future publication by the Bureau of Business Research.

DAVID CHINCHEN

Figure 1
RETAIL SALES INDEXES - 1978

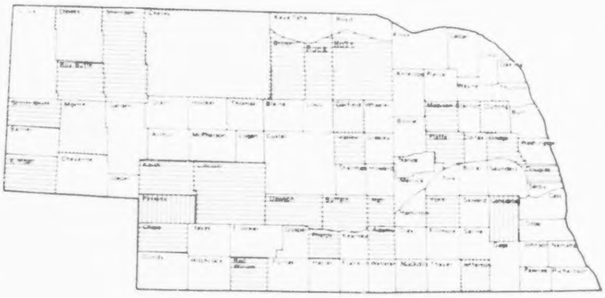
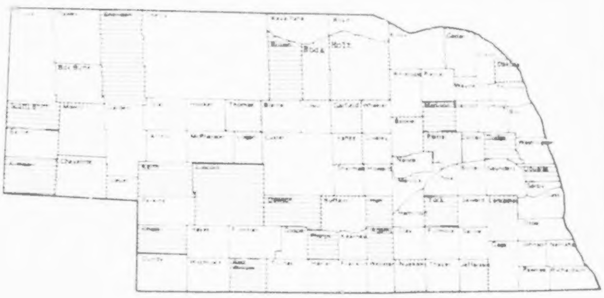


Figure 2
RETAIL SALES INDEXES - 1970



- ▤ Counties with both sales-share/population-share index and sales-share/personal income-share index over 100.
- ▭ Counties with only sales-share/personal income-share index over 100.
- ▥ Counties with only sales-share/population-share index over 100.
- ☐ Counties with neither sales-share/population-share index nor sales-share/personal income-share index over 100.

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ECONOMIC FORECAST FOR 1981

SUMMARY

National Economy

In 1981:

- Gross National Product will increase 1 percent in real terms.
- Inflation, as measured by the CPI, will average 11 percent.
- Unemployment rate will average 8 percent.
- Prime interest rate will average 13 percent.

Nebraska Economy

In 1981:

- Gross State Product will increase 4.0 percent in real terms.
- Unemployment rate will average 4.1 percent.
- Personal income will rise 11 percent in current dollars, 1 to 3 percent in real terms.

THE NATIONAL ECONOMY

The past year contained a varied menu of economic events and trends, few of which were encouraging. High inflation rates continued to plague the U.S. economy, with the rate reaching 14.7 percent in March and April when calculated from the Consumer Price Index on a year-to-year basis. Although the rate had declined to 12.6 percent by October, double-digit inflation (based on the CPI) was still present and the prospects for lowering inflation to the single-digit range look bleak over the short term. Oscillating interest rates also characterized 1980, with the prime rate on bank loans attaining 20 percent in the first part of the year. Rates then fell back rather dramatically as economic activity slowed in the second quarter. By the fourth quarter of the year, rates began a steady climb upward, with the prime rate again reaching 20 percent in the second week of December.

The long-awaited decline in economic activity occurred during 1980. Real Gross National Product decreased by a substantial 2.5 percent from the first quarter to the second quarter of the year. However, recently published figures for the third quarter of 1980 indicate that real Gross National Product increased very slightly from the second quarter. Thus, a dilemma has been created for recession pundits since the technical definition of a recession is two or more successive quarters of declines in real Gross National Product. This conflict between characterization and definition of a time span as a recession points out probable deficiencies in the definition. A 2.5 percent drop in real output (10 percent on an annualized basis) is indeed a major one-quarter drop, but technically it does not satisfy the reigning definition. Compare this state of affairs with a second case in which real output declines in two successive quarters but does so by only, say, 0.1 percent in each quarter. Obviously, the former situation is worse in terms of economic growth and performance. Thus, some deviation from the current definition is justified.

Speculation has also arisen concerning the possibility of a "double-dip" recession, that is, a significant decline in real Gross National Product during the fourth quarter of 1980 and/or the first quarter of 1981. Belief in the double-dip recession has been spurred by the renewed surge of interest rates and the continued high inflation during the final months of 1980. Even though this second decline in real output may occur, it would not be as severe as that experienced during the second quarter of 1980.

On balance, the new year can be expected to be one of modest recovery from the recession for the U.S. economy. The consensus opinion of analysts suggests that the economy will not attain its pre-recession level of real output until the third or fourth quarter of 1981. The year as a whole should find real output at only 1 percent above the level posted in 1980. Sudden spurts or declines in economic activity are not anticipated, even in the face of fiscal policy revisions, such as federal tax cuts, which are almost certain to be enacted. Several factors contribute to this rather pessimistic forecast for the national economy. First, the high level of interest rates will be a negative influence upon economic growth, particularly in the areas of housing and construction. The growth of consumer expenditures is also adversely affected by high interest rates. At the present time, consumer debt is quite high and additions to debt for

(Continued on page 2)

(Continued from page 1) financing expenditures may proceed at a slow rate. Interest rates should eventually fall back during 1981, with the prime rate receding to the 13 percent range. This will encourage some recovery of consumer and business spending. Second, the anticipated tax cut in 1981 will probably not come until the second quarter of the year. Lags in response to the cut will delay its effects. Even then, the net stimulus of the cut will be reduced because of hikes in Social Security taxes. Third, continued inflation rates in double digits will cause a flat performance for real personal income during the year. It is uncertain whether consumers will resort to cutting their saving rates in order to increase real expenditures. The saving rate is already at a historically low level for the end of a recessionary period. An oil price shock, predicted by some analysts as a result of current circumstances in the Middle East, would cause further deterioration in the real income situation.

THE NEBRASKA ECONOMY

The new year of 1981 is expected to be a year of recovery from the recession for the state economy, with the pace of recovery for the majority of Nebraska sectors being moderate. When searching for a definition of a recession at the state level, it is most convenient to adapt the national definition (two or more successive quarterly declines in real Gross National Product) to the total Gross State Product (GSP) of the state. Unfortunately, there is a relatively long time lag before GSP can be calculated. For example, the most current GSP values available for Nebraska are for 1979, and even those figures are preliminary at the time of this writing. However, examination of Table 1 indicates that total GSP in real terms for Nebraska declined very slightly from the third quarter to the fourth quarter of 1979, signaling Nebraska's apparent entry into the recession. It is interesting to note that the Nebraska economy probably entered the recession before the national economy. The latter fell into the recession sometime during March 1980, although on a quarterly accounting basis the signaling drop in real Gross National Product did not occur until the second quarter of 1980. As noted, there is no GSP information for Nebraska in 1980 as of yet, but the eventual reporting of those figures is expected to show real declines in at least the first two quarters of 1980. Several factors contribute to this belief, but the most support for it comes from the fact that real personal income in Nebraska declined from the third quarter of 1979 through the second quarter of 1980. Farm income during that time span was down significantly, having sustained a drop in real terms of 34 percent. Extreme variation over time in the farm income situation has been a characteristic of the Nebraska economy for some time.

To examine in more detail Nebraska's apparent lead of the national economy into the recession, it is useful to look at the growth rates of GSP, total and by industry, for the state during the fourth quarter of 1979. These rates are found toward the bottom of Table 1. The decline in total GSP was slight in that quarter, but the composition of that decline should be noted. Gross product in the agriculture sector declined by a substantial 10.3 percent, while the gross product of all other sectors of the state economy grew at a combined rate of 1.5 percent. The poor showing of the agriculture sector was severe enough to outweigh the combined gain of the other sectors. As the state economy entered 1980, the influence of a slowing national economy began to be felt, particularly in the manufacturing and construction sectors. Thus, Nebraska's lead of the national economy into recession was the result of a weakening in the agriculture sector which occurred shortly in advance of the more broadly based decline.

The extreme variation in the gross product of the agriculture sector in Nebraska has led the entire state economy on a roller coaster ride for the past several years. Table 1 lists the quarterly growth rates of gross product by industry, of total GSP, and of U.S. Gross National Product over 1977 through 1979. An index of the variation in the growth rates of these respective aggregates,

Table 1

PERCENTAGE RATES OF GROWTH BY QUARTER, 1977-1979

REAL U.S. GROSS NATIONAL PRODUCT AND NEBRASKA REAL GROSS STATE PRODUCT ACCOUNTS

Quarter	Total U.S. GNP	Total Nebr. GSP	Total Nebr. Non-Ag. GSP	Ag.	Manuf.	Constr.	Govt.	F.I.R.[1]	T.C.U.[2]	Serv.[3]	Trade	Mining
1977-I	2.1	2.6	1.4	11.5	4.2	2.6	1.2	0.8	0.7	-0.4	2.1	10.0
1977-II	1.2	0.3	0.5	-0.6	0.6	0.4	-0.3	2.5	-1.0	-0.1	0.4	-8.8
1977-III	1.7	2.4	1.5	8.3	1.2	-1.0	0.9	1.0	3.4	0.5	2.8	3.6
1977-IV	0.5	6.2	0.1	44.1	-0.5	-3.2	2.4	3.0	1.9	1.3	-4.3	-3.2
1978-I	0.5	-9.9	-2.5	-42.1	-4.5	-7.5	-1.7	-3.3	-2.7	2.1	-1.7	7.9
1978-II	2.0	6.3	4.7	18.3	10.0	13.7	0.7	3.6	2.8	2.1	4.4	-6.8
1978-III	0.9	-0.01	2.3	-15.4	2.6	1.7	2.6	2.6	2.1	1.9	2.1	-0.9
1978-IV	1.4	6.5	1.5	45.6	1.7	0.4	2.7	0.4	4.8	0.3	0.3	3.5
1979-I*	0.3	-4.8	-0.7	-27.2	-1.8	-19.9	-1.7	-3.4	9.8	0.8	0.9	-12.1
1979-II*	-0.6	3.0	0.7	20.1	1.7	2.9	-0.1	2.4	-3.9	-1.7	2.9	4.5
1979-III*	0.8	0.4	1.7	-7.3	2.2	0.3	-0.4	1.3	3.3	3.1	1.4	-5.5
1979-IV*	0.5	-0.02	1.5	-10.3	-0.3	-3.3	0.5	3.6	3.3	2.6	0.9	7.7
Standard Deviation of Growth Rates	0.8	4.8	1.7	26.5	3.5	7.8	1.5	2.4	3.6	1.4	2.3	7.3

---

*Gross State Product figures are preliminary.

[1] Finance, Insurance, Real Estate.

[2] Transportation, Communication, Utilities.

[3] Services.

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known as the standard deviation, was calculated and appears on the bottom line of the table. The greater the standard deviation of the aggregate's growth rate, the more variation it has. For example, total GSP has been much more variable than its U.S. counterpart of Gross National Product during the time span. Thus, the Nebraska economy in total has been less stable than the national economy. However, if the agriculture sector is excluded from total GSP, the nonagriculture component of the state economy has been subject to much less variation. The standard deviation of nonagriculture GSP is comparable to that of U.S. Gross National Product. Next, focusing exclusively upon the agriculture sector, we see that its standard deviation of growth rates is extremely high. This crude analysis suggests that indeed it is the agriculture sector which accounts for a major part of the growth rate variation in the state economy as a whole.

Table 2 contains forecasts of selected economic variables for Nebraska in 1981. Forecasts are given for the four quarters of the year and for the year in total. The yearly value is calculated as either the average of the four quarters or as the sum of the four quarters, depending upon the manner in which the variable is measured. For example, the quarterly GSP items, the employment items, and personal income are measured in terms of annual rates so the yearly values of those items are averages of quarterly values. In contrast, sales and housing units are reported as quarterly flows so their yearly totals are obtained as sums. The 1979 totals for the variables are also reported in the table, along with the implied growth rates over the two-year period, 1979-1981. The year of 1979 was chosen for comparison with

(Continued on page 6)

Table 2
NEBRASKA ECONOMIC FORECASTS
QUARTERLY, 1981:1 - 1981:4

	1981:1	1981:2	1981:3	1981:4	1981 Total	1979 Total	1979-1981 Growth Rate (percent)
Real Gross State Product - Total (millions of 1972 dollars, SAAR[1])	10,717.1	10,791.6	10,825.3	10,965.6	10,824.6	10,407.6	4.0
Real GSP - Durables Manufacturing (millions of 1972 dollars, SAAR)	776.0	781.1	789.8	797.6	786.1	804.2	−2.3
Real GSP - Nondurables Manufacturing (millions of 1972 dollars, SAAR)	885.2	883.1	883.8	888.0	885.0	877.9	0.8
Real GSP - Agriculture (millions of 1972 dollars, SAAR)	1,410.1	1,448.8	1,436.8	1,530.3	1,456.5	1,301.8	11.9
Real GSP - Finance, Insurance, Real Estate (millions of 1972 dollars, SAAR)	1,754.1	1,767.4	1,782.0	1,790.7	1,773.6	1,683.6	5.3
Real GSP - Services (millions of 1972 dollars, SAAR)	1,034.8	1,038.0	1,041.7	1,047.0	1,040.4	985.9	5.5
Real GSP - Trade (millions of 1972 dollars, SAAR)	1,909.4	1,912.5	1,917.0	1,925.3	1,916.1	1,854.8	3.3
Unemployment Rate, NSA[2]	4.6	4.0	3.8	3.9	4.1	3.1	---
Employment - Durables Manufacturing (thousands, NSA)	47.6	48.0	48.1	47.8	47.9	52.7	−9.1
Employment - Nondurables Manufacturing (thousands, NSA)	46.1	46.0	46.5	47.1	46.4	46.4	0.0
Employment - Construction (thousands, NSA)	25.1	31.1	33.0	29.8	29.8	33.5	−11.0
Employment - Finance, Insurance, Real Estate (thousands, NSA)	42.8	43.4	43.8	43.6	43.4	40.9	6.1
Employment - Services (thousands, NSA)	119.0	122.5	122.7	122.7	121.7	114.3	6.5
Employment - Trade (thousands, NSA)	167.1	171.6	172.8	174.0	171.4	164.0	4.5
Nebraska Personal Income (billions, SAAR)	15,347	15,829	16,248	16,866	16,073	13,668	17.6
Net Taxable Retail Sales (millions, NSA)	2,310.5	2,566.9	2,647.8	2,780.7	10,305.9	8,736.3	17.9
Housing Units Authorized for Construction (number, NSA)	1,142	2,600	2,212	1,829	7,783	9,117	−14.6

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[1] SAAR - Seasonally adjusted at annual rates.
[2] NSA - Not seasonally adjusted.

Review and Outlook

Nebraska's real output declined in September compared to August. The physical volume index of the Nebraska economy slipped 1.1% in September. Nebraska's economy remains below peak 1979 levels and has now slipped somewhat from the July recovery levels.

The September decrease was attributable to a decline in agriculture resulting from reduced cash farm marketing receipts. The nonagriculture sector of the Nebraska economy also declined, but the decrease was much smaller than that of the agriculture sector.

The agriculture sector recorded a September-to-August output decrease of 5.6%. On a seasonally adjusted basis, cash receipts were down more than $105 million when compared with August, a 17.4% decrease. The September decline in agriculture cash receipts may not be representative of more extended trends, since receipts on a year-to-year basis are up $16 million or 3.6%. Nationally, cash farm marketing receipts were down more than $1.1 billion on a month-to-month basis, but up approximately $300 million or 2.6% on a year-to-year comparison. Agriculture prices received continue to lag behind prices paid, with prices received increasing 8.8% on a year-to-year basis while prices paid are up 11.8%.

The nonagriculture sector of the Nebraska economy declined 0.4% in September. These sectors presented a mixed pattern in September, with construction and manufacturing recording increases and the distributive trade

(Continued on page 5)

Notes for Tables 1 and 2: (1) The "distributive" indicator represents a composite of wholesale and retail trade; transportation, communication and utilities; finance, insurance, and real estate; and selected services. (2) The "physical volume" indicator and its components represent the dollar volume indicator and its components adjusted for price changes using appropriate price indexes--see Table 5, page 5.

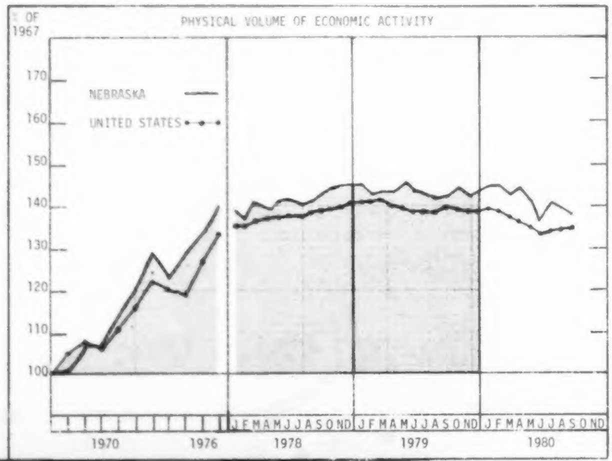
ECONOMIC INDICATORS: NEBRASKA AND UNITED STATES

1. CHANGE FROM PREVIOUS YEAR

September 1980	Current Month as Percent of Same Month Previous Year		1980 Year to Date as Percent of 1979 Year to Date	
Indicator	Nebraska	U.S.	Nebraska	U.S.
Dollar Volume	107.4	106.8	108.3	108.8
Agricultural	121.7	102.6	117.1	106.6
Nonagricultural	105.4	106.9	107.1	108.8
Construction	79.7	94.3	74.9	102.2
Manufacturing	111.1	106.7	112.7	109.6
Distributive	105.7	108.1	108.5	109.5
Government	105.6	107.0	105.2	106.8
Physical Volume	96.5	95.8	97.7	96.9
Agricultural	111.8	94.4	117.4	107.8
Nonagricultural	94.7	95.8	95.4	96.6
Construction	72.6	85.9	67.3	91.8
Manufacturing	98.5	94.6	99.5	95.5
Distributive	93.9	96.0	95.3	96.2
Government	98.8	100.9	98.1	101.8

2. CHANGE FROM 1967

Indicator	Percent of 1967 Average	
	Nebraska	U.S.
Dollar Volume	342.4	322.1
Agricultural	355.3	312.8
Nonagricultural	340.2	322.4
Construction	236.1	295.6
Manufacturing	354.9	288.5
Distributive	351.1	347.1
Government	330.2	308.4
Physical Volume	138.0	134.5
Agricultural	130.6	118.9
Nonagricultural	139.0	135.0
Construction	77.9	97.6
Manufacturing	160.2	129.7
Distributive	139.5	137.9
Government	138.2	150.0

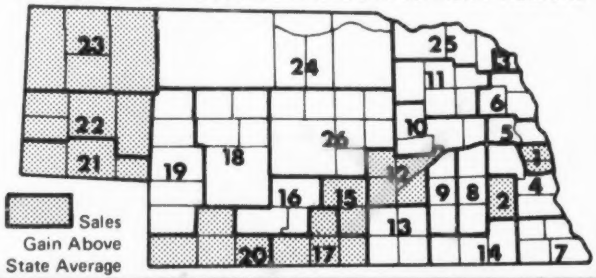


3. NET TAXABLE RETAIL SALES OF NEBRASKA REGIONS AND CITIES (Adjusted for Price Changes)

Region Number and City	City Sales*	Sales in Region*	
	Sept. 1980 as percent of Sept. 1979	Sept. 1980 as percent of Sept. 1979	Year to date '80 as percent of Year to date '79
The State	92.0	91.0	90.0
1 Omaha	96.4	95.1	90.9
Bellevue	90.9		
2 Lincoln	93.2	92.5	91.1
3 So. Sioux City	84.3	81.9	87.8
4 Nebraska City	108.1	88.2	83.3
5 Fremont	91.5	92.2	85.9
Blair	104.9		
6 West Point	101.9	82.8	80.3
7 Falls City	97.7	85.0	84.8
8 Seward	106.2	91.5	85.9
9 York	98.5	92.2	87.9
10 Columbus	90.0	85.7	86.1
11 Norfolk	92.2	84.5	83.5
Wayne	68.8		
12 Grand Island	101.3	101.1	91.4
13 Hastings	90.9	92.2	88.1
14 Beatrice	81.9	85.4	86.7
Fairbury	87.1		
15 Kearney	94.7	97.3	89.1
16 Lexington	94.0	93.0	88.5
17 Holdrege	99.0	93.7	89.0
18 North Platte	89.4	87.8	84.0
19 Ogallala	100.7	104.1	88.2
20 McCook	99.4	101.9	91.7
21 Sidney	86.0	87.7	95.2
Kimball	98.1		
22 Scottsbluff/Gering	97.3	96.3	91.0
23 Alliance	87.5	89.8	91.0
Chadron	96.7		
24 O'Neill	100.6	90.8	84.2
25 Hartington	96.5	86.1	81.3
26 Broken Bow	94.9	95.0	86.8

*State totals include sales not allocated to cities or regions. The year-to-year ratios for city and region sales may be misleading because of changes in the portion of unallocated sales. Region totals include, and city totals exclude, motor vehicle sales. Sales are those on which sales taxes are collected by retailers located in the state. Compiled from data provided by Nebraska Department of Revenue.

1980 YEAR TO DATE AS PERCENT OF 1979 YEAR TO DATE IN NEBRASKA'S PLANNING AND DEVELOPMENT REGIONS



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(Continued from page 4)

and government recording decreases. Construction in September was 2.3% above the August level. Activity in the construction sector remains below year-previous levels, but is up more than 10% from the low point recorded in June 1980.

The manufacturing sector of Nebraska's economy recorded a slight increase in output, with the index increasing 0.5% in September. The index of manufacturing activity in Nebraska now stands higher than it has since May of 1980. On a year-to-year basis, manufacturing activity was little changed from September 1979. Over the course of the past year, output in the manufacturing sector expanded through February 1980 and then declined. The decline in manufacturing activity extended through August 1980, with the September increase being the first monthly increase in this sector since February. For purposes of comparison, the manufacturing index stood at 157.2 in September 1978, 162.6 in 1979, and 160.2 in 1980.

Economic activity in the distributive trade sector declined in September from August levels by 0.9%. After recording a substantial increase in July 1980, the distributive trade index has drifted downward during the past two months. Output in this sector is below that recorded in September 1979 by more than 6%.

The index of activity in the government sector declined 0.3% in September compared with August. This index has changed very little during the past year and stands 1.2% below September 1979 levels.

A summary of the state's economy in September 1980 suggests an economy operating below year-previous levels, having made some modest comeback from the first and second quarter 1980 declines. The Nebraska economy in September could be characterized as sluggish.

September retail sales increased 1.5% on a dollar volume basis compared with year-previous levels. Dollar volume nonmotor vehicle sales were up 2.7%, while motor vehicle sales were down 8.7%. Since prices increased more than 12% over that interval, real retail sales were down 8% in September. The Consumer Price Index on a September-to-September basis recorded a 13.8% increase, with the commodity component of consumer prices increasing 12.5%. Wholesale prices were up even more over this same interval, recording a 14.4% increase.

Substantial gains in retail sales in September were recorded in Nebraska City and Seward, where real retail sales were up 8.1% and 6.2%, respectively. Real gains in retail sales were also recorded in Blair, up 4.9%; West Point, up 1.9%; Grand Island, up 1.3%; Ogallala, up 0.7%; and O'Neill, up 0.6%. Dollar volume gains nearly matching the rate of inflation were recorded in McCook, Holdrege, York, Kimball, and Scottsbluff/Gering.

D. E. P.

5. PRICE INDEXES

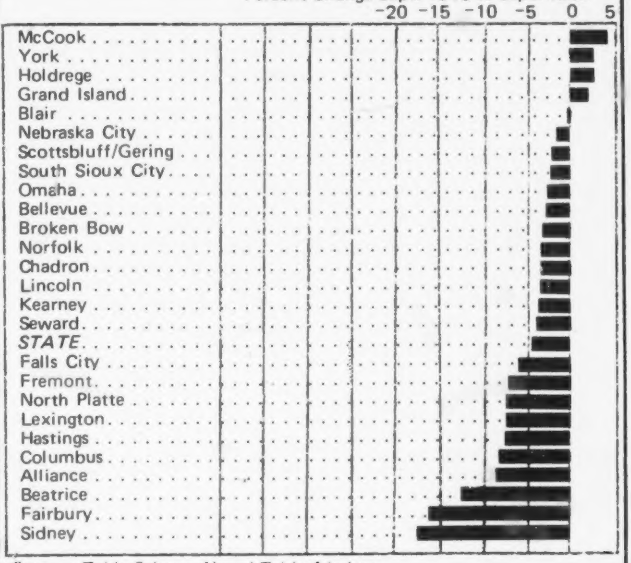
September 1980	Index (1967 = 100)	Percent of Same Month Last Year	Year to Date as Percent of Same Period Last Year*
Consumer Prices	251.7	112.7	113.8
Commodity component	239.0	111.6	112.5
Wholesale Prices	274.1	113.3	114.4
Agricultural Prices			
United States	263.0	108.7	99.2
Nebraska	272.0	108.8	99.9

*Using arithmetic average of monthly indexes.

Sources: Consumer and Wholesale Prices: U.S. Bureau of Labor Statistics; Agricultural Prices: U.S. Department of Agriculture.

CITY BUSINESS INDEXES

Percent Change Sept. 1979 to Sept. 1980



Source: Table 3 (page 4) and Table 4 below.

4. SEPTEMBER CITY BUSINESS INDICATORS

The State and Its Trading Centers	Percent of Same Month a Year Ago		
	Employment[1]	Building Activity[2]	Power Consumption[3]
The State	97.7	79.2	103.8
Alliance	96.8	58.5	98.3
Beatrice	98.5	56.0	79.7
Bellevue	98.6	137.1	99.1
Blair	95.4	79.3	108.1
Broken Bow	97.5	58.0	122.3
Chadron	96.6	116.2	83.8
Columbus	95.9	37.0	116.7
Fairbury	97.1	18.9	74.3
Falls City	98.6	28.0	113.3
Fremont	100.1	59.4	84.1*
Grand Island	97.3	142.1	109.5
Hastings	97.6	54.4	95.9
Holdrege	97.0	48.2	170.6
Kearney	97.8	76.2	104.1
Lexington	96.1	43.5	100.9
Lincoln	98.5	77.9	107.3
McCook	96.6	85.6	165.2
Nebraska City	96.9	46.2	101.9
Norfolk	96.4	58.9	132.8
North Platte	97.5	51.5	108.7
Omaha	98.6	82.5	101.1
Scottsbluff/Gering	97.0	83.4	111.9
Seward	94.8	30.5	107.9
Sidney	95.8	14.0	86.4
So. Sioux City	98.0	279.7	104.2
York	97.0	245.4	102.5

[1] As a proxy for city employment, total employment for the county in which a city is located is used.

[2] Building Activity is the value of building permits issued as spread over an appropriate time period of construction. The U.S. Department of Commerce Composite Construction Cost Index is used to adjust construction activity for price changes.

[3] Power Consumption is a combined index of consumption of electricity and natural gas except in cases marked * for which only one is used.

Source: Compilation by Bureau of Business Research from reports of private and public agencies.

(Continued from page 3)

1981 because data on the variables is not available for the full year of 1980.

All of the forecasts in Table 2 were generated from the Nebraska Quarterly Econometric Model-I, which was recently developed by the author under the auspices of a grant to the Bureau of Business Research. The model is a mathematical and statistical description of major economic variables of Nebraska and their interactions. Currently, the model is capable of forecasting approximately forty economic variables in the state.

The forecast for total GSP in 1981 indicates that the state economy will resume growth and finish the year with a 4 percent gain over 1979 in real terms. This anticipated performance would represent a healthy recovery from the recession of 1980. All industries will not share equally in this resumption of state growth. (Please note that all Nebraska sectors are not separately listed in Table 2.) The gross product of the durables manufacturing industry is not expected to reach its 1979 level, although there will be modest real growth in the industry throughout the year. This industry was hit relatively hard by the recession and recovery will be slow. Nondurables manufacturing is in a somewhat similar situation of slow real growth. However, the gross product of nondurables in 1981 will be slightly higher in real terms for 1981 than it was in 1979. The recession apparently did not hit nondurables as hard as durables manufacturing.

The gross product of the agriculture sector is forecasted to grow at a healthy rate during 1981 and post an 11.9 percent gain over 1979 in real terms. Several items support this contention, including the prospective strength of grain prices into 1981 and partial recovery of beef prices as the nation moves slowly out of the recession. The services sector and the finance, insurance, real estate sector are also expected to post percentage gains in their gross products which are above the average growth rate for the state total. Both of these industries have been fairly steady in their performance over time. Finally, the trade industry is forecasted to show real growth in 1981, but its rate of growth with respect to 1979 will be a bit lower than the state average.

The unemployment rate on a labor force basis during 1981 is expected to be highest (4.6 percent) in the first quarter, with rates in succeeding quarters being significantly lower. Two important characteristics of the unemployment rate should be noted. First, the rate is typically higher in the first quarter due to standard seasonal factors. Second, unemployment can lag a business slowdown to some degree. However, the forecast of 4.6 percent for the rate in the first quarter may seem a bit high and a rate closer to 4 percent would come as no surprise. As in the case of gross product, some sectors will experience employment gains while some will have losses.

Employment in durables manufacturing during 1981 is expected to be 9.1 percent below the level of 1979 due to the impact of the slowdown in 1980 and the modest pace of recovery in the sector during 1981. However, employment in nondurables manufacturing will attain the level posted in 1979. The employment situation in construction is not expected to show any improvement, with an average of 29,800 workers on the job in 1981 compared to an average of 33,500 in 1979. Volatile interest rates and the resulting scheduling problems for construction projects introduces instability in the construction employment situation. But employment in the trade sector, the services sector, and the finance, insurance, real estate sector will show gains in 1981 over 1979. Growth in these sectors will serve to offset the employment declines in durables manufacturing and construction and keep the Nebraska unemployment rate at characteristically low levels.

Personal income, after declines during 1980, is forecasted to grow at a healthy pace in 1981 and show a gain of 17.6 percent over 1979 in current dollar terms. After adjustment for inflation, the real growth rate over the two years will be in the 0 to 2 percent range. The upward movement of personal income over the quarters of 1981 should be fairly constant, with perhaps a slight slowing of the trend between the second and third quarters of the year. Net taxable retail sales are expected to grow at about the same rate as personal income, finishing 1981 at a level that is 17.9 percent above sales in 1979. Sales during the first six months of 1980 were extremely sluggish, with the motor vehicle component of total sales showing substantial drops. Thus, the relatively optimistic forecast of total sales for 1981 depends upon a partial rebound of motor vehicle sales.

Finally, the number of housing units authorized for construction in Nebraska during 1981 will remain below their 1979 total. There were 9,117 units authorized in 1979, but roughly 7,800 are expected for 1981. However, the 1981 forecast does represent an improvement over 1980 when only 2,721 units were authorized during the first six months.

J. R. S.

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SHOULD TAXES BE USED TO CONTROL INFLATION?

Between the second quarter of 1979 and the second quarter of 1980, hourly compensation in American manufacturing rose at annual rates of 7.8, 8.8, 10.5, and 14.7 percent. Productivity fell during three of the four quarters. Can the short-run inflation rate be reduced under these circumstances?

For an increasing number of economists the answer is yes, if we adopt some form of tax-based incomes policy (TIP), that is, use the tax system to implement pay guidelines.

The guideline would be the long-term nationwide increase in productivity plus some adjustment for the current rate of inflation. If inflation is 10 percent and long-term productivity gains 2 percent, the pay guideline might be 7 percent. The pay guideline would be reduced over a period of three to four years as consumer prices followed pay settlements downward. Pay is defined as the wages, salary, and private fringe benefits for all employees—production, clerical, managerial, and executive.

Adherence to the pay guidelines might be achieved in a number of ways.[1] Sidney Weintraub and Henry Wallich have proposed that a penalty rate of tax be levied on the net income of any corporation (subject to the program) whose average annual pay increase for all employees exceeds the stipulated guidelines. The penalty tax rate could be progressive, rising sharply for severe violations. It is proposed that the normal corporate income tax rate be lowered sufficiently to offset any taxes collected under the program. Since high productivity industries could afford to ignore the wage guideline, this form of TIP is largely an attempt to strengthen business resistance to pay increases in low-productivity industries.

Arthur Okun has argued for a reward in the form of a tax credit for employees of firms whose average annual pay increase for all employees is in accordance with the guideline. Qualifying workers would obtain a tax reduction equal to a specified percent of their wages and salary up to some maximum income level. Employees of firms in violation of the guideline would be denied the tax credit. This form of TIP requires a general subsidy from government to low-productivity industries.

Mancur Olson has suggested a combined tax/subsidy TIP with the funds collected from firms granting wage increases above the guidelines going to firms who keep their pay increases at or below the guidelines. It is proposed that a progressive structure of subsidy/tax payments be tied to departures from the guidelines. No net increase in taxation is expected under this program. This form of TIP amounts to a subsidy from high-productivity industries to low-productivity industries if, as it seems likely, high-productivity industries generally ignore the wage guidelines.

Wage increases would presumably moderate under each of these programs because firms would act to protect their profits. This they may do either by enrolling their employees in the tax credit program or stubbornly resisting unusually large wage demands under a tax penalty or tax/subsidy program. It is believed that the slowdown in wages will be translated into a slowdown in prices, after a short lag. This belief rests on the macrostatistical observation that the growth rate of prices is, on average, roughly equal to the growth rate of unit labor cost.

The chief advantage claimed for tax-based income policies is that they are efficient in the sense that they do not interfere with market-based decisions. In principle, each firm which has a market incentive to violate the guidelines is free to do so, subject only to the tax penalty (subsidy). Thus serious misallocation of resources is avoided.

The chief alleged weakness in the proposed tax-based income policies is that the distinction between them and a formal control program is unclear. The problem of the appropriate wage guidelines exists, as do the problems of computing weighted indexes, selecting appropriate base years, defining appropriate coverage, providing for exclusions based on equity considerations, and ensuring the audit and verification of program elements. These problems are more severe under some forms of TIP than others. However, a recent study of the administrative burdens of TIP concluded that even the most carefully designed and limited TIP would entail significant administrative and compliance problems for both the Internal Revenue System and for business.[2] Some proponents of TIP, for example, Arthur Okun and Lawrence Seidman, believe that these problems are nevertheless manageable at a cost well below their promised benefits. Others, like Gardner Ackley and Alan Greenspan, believe the administrative complexity of TIP is very possibly a fatal flaw.

As a practical matter, the fact that TIP focuses solely on wage and salary income makes it unacceptable to organized labor. As a matter of equity, either all forms of income—salary and wages, profits, dividends, rents, and interest income—must be subject to the tax penalty (subsidy) or prices must be the focus of the TIP program. The difficulty with broadening TIP along either of these lines is that the added benefits in the

(Continued on page 2)

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[1] For an overview of the debate surrounding short-run anti-inflation policies, the reader is encouraged to consult David C. Colander, ed., *Solutions to Inflation* (Harcourt, Brace, Jovanovich, Inc., 1979).

[2] Larry L. Dildine and E. M. Scanley, "Administrative Problems of Tax-Based Income Policies," in Arthur M. Okun and G. L. Perry, eds., *Curing Chronic Inflation* (The Brookings Institution, 1978), pp. 127-153.

(Continued from page 1)

form of price relief are likely to be small relative to the additional costs of administration.

David Colander has suggested that this equity problem can be overcome if value added (or net sales) rather than wages is made the object of TIP. Value added is the difference between a firm's gross sales and its purchases from other firms. Thus it is the sum of the profit, wage, rent, and interest income originating within the firm.

Unfortunately, the use of value added or net sales risks undermining much needed improvements in productivity in the economy. Net sales are the product of price and quantity and the latter may change due to changes in labor, capital, or the organization of production. To avoid a tax on productivity, it would therefore be necessary to adjust the general guidelines for each firm according to the changes in inputs and organization specific to that firm. While these problems are perhaps manageable, they are not unlike the administrative burdens which make a full-blown income control program unattractive. In addition, under a value-added TIP, a firm will find itself subject to the tax if its sales are unexpectedly large, even though there is no increase in its prices. And it may avoid taxation with unexpectedly low sales despite perhaps significant increases in prices. These complications may well weaken the equity basis of the value-added TIP and may, in part, frustrate the objective of price stability.

The use of tax incentives to induce price restraint is attractive because it appears consistent with the tenets of a free-enterprise economy. To its proponents, TIP offers the promise of price stability with minimal interference with economic freedom and resource allocation. It impinges on private economic power in a broad and seemingly impersonal way. There is an expectation in TIP that the exercise of private economic power will be in the public interest so long as government provides the appropriate market incentive (disincentive).

The promise of TIP may well prove to be illusory. The Weintraub-Wallich proposal penalizes all industries in an attempt to build business resistance to inflationary pay demands in low productivity-gain industries. Both the Okun and Olson variants propose to subsidize low productivity-gain industries. If effective, these programs seem likely to distort relative wages and undermine much needed long-run productivity gains in the economy as a whole.

TIP proposals are based on an unrealistic view of labor-business relations in industries characterized by large firms and strong unions. TIP puts the union in the position of asking its members to accept reductions in real wages regardless of the productivity gains of the industry. If, for example, the guideline is 7 percent and the inflation rate is 10 percent, workers with 2 percent productivity gains would be asked to accept a 3 percent *reduction* in their real wage, though they would surely think themselves entitled to a 2 percent increase in real income. While the social justification for this is that any wage gain in excess of productivity gains is inflationary, it is difficult to see why unions in a position to make real wage gains should voluntarily give them up. The issue is the long-standing one of market power and institutional rigidities. One might reasonably ask how long short-run public policies which ignore the institutional basis of our economic problems can be expected to earn the support of the American people.

Perhaps it is time to adopt short-run policies which confront head-on the structural foundations of the inflationary bias in the economy. A serious guidelines policy, together with responsible monetary policy, is sufficient to eliminate the inflationary bias in the economy. However, such a program must be properly focused (on industries characterized by market failure) and backed by meaningful economic sanctions.

The Carter guidelines program has been ineffective due to an unfortunate focus on individual firms rather than selected markets and an inability (or unwillingness) to confront the institutional arrangements which impede the operation of market forces in particular industries. These problems are likely to defeat any program centered in the White House.[3]

A serious guidelines program probably requires at least the following:[4] (1) the creation of an independent price-wage regulatory agency by Congress, (2) the provision for labor-business-public participation in the formation of broad agency policy (visible evidence of a social consensus), and (3) provision for a permanent, full-time professional staff with statutory authority to: (a) require prenotification of price-wage changes, (b) obtain data and documents in support of proposed price-wage changes, and (c) prohibit proposed price-wage changes when agency standards are substantially violated.

The singular advantage of a nonpoliticized guidelines policy is that it would require the affected parties (those with market power) to consent to price-wage restraint based on demonstrable market conditions. Admittedly, this is a politically difficult course to follow.

Public support for a pro-competitive policy is mixed. The essential elements of a pro-competitive policy (freedom to contract and exchange) were included in one of four alternative economic scenarios recently submitted to a panel of influential Americans drawn from labor, business, government, and public interest groups.[5] The other scenarios were weighted with environmental-humanist concerns (improving the quality of life), corporate statism (maximizing economic growth and efficiency), and egalitarianism (promoting social and economic equality). On average, the panelists expressed a modest preference for pro-competitive reform. However, the executives on the panel believed their employers overwhelmingly favored corporate statism and influential labor members expressed overwhelming support for egalitarian reforms.

(Continued on page 6)

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[3] My own experience at the Council on Wage and Price Stability during 1975 and 1976 led me to believe that a vigorous market information program backed by the influence of the White House was a sufficient supplement to responsible monetary policy for the purpose of promoting short-term price stability. See "Inflation: Can We Break the Momentum?" *Business in Nebraska* 58 (April, 1979). Complete market information is a potent force for price restraint. However, the White House will sometimes prove to be a poor pillar upon which to erect such a program. Thus it seems best to center a serious guidelines program in an independent regulatory agency.

[4] The conditions are essentially those set out in Gardner Ackley, "An Incomes Policy for the 1970's," *Review of Economics and Statistics* 54 (August, 1972), pp. 218-223.

[5] James O'Toole, "What's Ahead for the Business-Government Relationship," *Harvard Business Review*, March-April, 1979, pp. 94-105.

Table 1
NEBRASKA PERSONAL INCOME BY SOURCE
1973-75 COMPARED WITH 1976-78
(in percent)

	Dividends Int., Rent		Transfer Payments		Total Wages and Salaries	
County	1973-75	1976-78	1973-75	1976-78	1973-75	1976-78
Adams	19.6	20.3	11.9	12.3	68.5	67.4
Antelope	19.1	22.1	12.8	13.5	68.1	64.4
Arthur	19.4	21.8	8.7	10.8	71.9	67.4
Banner	15.1	19.4	3.5	5.6	81.4	75.0
Blaine	20.9	35.2	12.8	17.7	66.3	47.1
Boone	19.9	24.1	12.3	13.4	67.8	62.5
Box Butte	22.1	23.3	10.1	11.2	67.8	65.5
Boyd	21.9	26.1	16.7	19.9	61.4	54.0
Brown	25.6	27.7	13.1	13.7	61.3	58.6
Buffalo	17.6	19.0	10.9	11.3	71.5	69.7
Burt	19.7	23.5	12.5	16.2	67.8	60.3
Butler	22.8	28.7	11.6	14.9	65.6	56.4
Cass	15.4	17.0	11.7	14.1	72.9	68.9
Cedar	20.8	22.1	13.4	13.7	65.8	64.2
Chase	15.3	21.6	8.6	11.0	76.1	67.4
Cherry	29.3	31.6	10.8	12.6	59.9	55.8
Cheyenne	19.2	22.2	12.1	14.2	68.7	63.6
Clay	20.5	25.9	11.8	14.0	67.7	60.1
Colfax	27.5	29.5	13.0	14.3	59.5	56.2
Cuming	20.7	25.9	9.7	12.4	69.6	61.7
Custer	25.4	28.7	13.2	15.0	61.4	56.3
Dakota	11.1	11.6	11.0	11.7	77.9	76.7
Dawes	21.6	23.5	13.7	16.1	64.7	60.4
Dawson	21.2	22.7	10.5	11.5	68.3	65.8
Deuel	23.9	28.2	10.8	13.1	65.3	58.7
Dixon	19.5	23.6	13.2	15.9	67.3	60.5
Dodge	18.0	18.6	10.8	12.2	71.2	69.2
Douglas	13.1	12.9	10.6	11.2	76.3	75.9
Dundy	19.2	25.9	10.5	12.0	70.3	62.1
Fillmore	23.6	27.3	10.0	11.5	66.4	61.2
Franklin	24.7	28.0	13.5	15.1	61.8	56.9
Frontier	20.6	24.5	9.2	12.0	70.2	63.5
Furnas	24.8	30.6	15.8	18.1	59.4	51.3
Gage	21.2	21.5	13.1	14.0	65.7	64.5
Garden	22.3	27.0	11.9	14.9	65.8	58.1
Garfield	31.0	33.9	15.4	18.1	53.6	48.0
Gosper	22.4	28.6	8.0	10.7	69.6	60.7
Grant	35.8	33.0	14.7	15.6	49.5	51.4
Greeley	22.7	27.2	14.5	16.0	62.8	56.8
Hall	19.0	20.0	12.8	13.6	68.2	66.4
Hamilton	17.7	21.9	8.4	9.9	73.9	68.2
Harlan	22.3	28.5	12.2	14.2	65.5	57.3
Hayes	15.4	26.8	6.5	13.4	78.1	59.8
Hitchcock	19.6	27.5	11.5	14.9	68.9	57.6
Holt	20.3	21.8	13.3	13.9	66.4	64.3
Hooker	28.5	32.9	14.7	15.8	56.8	51.3
Howard	23.6	27.7	12.5	14.2	63.9	58.1
Jefferson	24.3	26.5	13.1	14.5	62.6	59.0
Johnson	23.3	26.2	12.9	15.7	50.5	58.1
Kearney	17.8	23.1	7.7	9.2	74.5	67.7
Keith	20.8	22.4	10.9	12.0	68.3	65.6
Keya Paha	30.1	37.9	12.2	15.1	57.7	47.0
Kimball	17.8	20.7	8.5	10.3	73.7	69.0
Knox	22.9	25.5	17.4	18.6	59.7	55.9
Lancaster	17.2	16.3	9.4	9.8	73.4	73.9
Lincoln	16.6	16.2	15.0	14.8	68.4	69.0
Logan	30.6	33.5	12.0	14.2	57.4	52.3
Loup	28.3	41.7	12.6	20.4	59.1	37.9
Madison	17.9	17.6	10.2	10.4	71.9	72.0
McPherson	30.2	39.5	13.0	15.4	56.8	45.1
Merrick	22.5	27.1	11.2	13.9	66.3	59.0
Morrill	15.2	19.0	12.4	15.5	72.4	65.5
Nance	21.0	24.4	13.8	16.1	65.2	59.5
Nemaha	18.1	20.5	12.9	16.1	69.0	63.4
Nuckolls	21.3	23.9	12.8	15.6	65.9	60.5
Otoe	22.7	24.6	12.3	13.6	65.0	61.8
Pawnee	25.6	30.3	14.7	17.6	59.7	52.1
Perkins	17.0	20.0	7.6	9.2	75.4	70.8
Phelps	24.1	27.9	10.1	12.0	65.8	60.1
Pierce	19.7	20.6	12.5	12.4	67.8	67.0
Platte	16.9	17.2	8.6	9.3	74.5	73.5
Polk	22.8	29.4	10.6	13.4	66.6	57.2
Red Willow	20.5	21.7	10.6	12.0	68.9	66.3
Richardson	22.9	25.8	14.4	16.5	62.7	57.7
Rock	27.9	27.3	13.8	12.8	58.3	59.9
Saline	24.3	27.0	11.9	12.4	63.8	60.6
Sarpy	6.9	6.6	6.9	7.6	86.2	85.8
Saunders	19.0	21.8	11.3	13.3	69.7	64.9
Scotts Bluff	16.9	19.6	10.5	12.5	72.6	67.9
Seward	21.9	24.6	10.6	12.9	67.5	62.5
Sheridan	28.1	29.5	14.0	15.1	57.9	55.4
Sherman	20.9	21.9	14.9	15.3	64.2	62.8
Sioux	21.0	31.7	8.3	12.7	70.7	55.6
Stanton	17.1	19.3	8.2	9.4	74.7	71.3
Thayer	23.7	27.9	12.7	14.3	63.6	57.8
Thomas	34.5	42.5	16.6	17.7	48.9	39.8
Thurston	13.0	15.0	12.6	15.0	74.4	70.0
Valley	25.3	28.8	13.5	14.9	61.2	56.3
Washington	17.8	19.6	9.5	10.8	72.7	69.6
Wayne	20.2	21.4	10.3	12.5	69.5	66.1
Webster	25.5	28.5	14.9	16.3	59.6	55.2
Wheeler	20.2	22.9	10.6	13.6	69.2	63.5
York	20.9	25.2	8.9	10.6	70.2	64.2
U.S.	13.3	13.7	12.7	13.6	74.0	72.7
NEBRASKA	17.3	18.0	10.9	11.9	71.8	70.1

Review and Outlook

Nebraska's real outlook decreased 0.9% in October following two months of little change in the index. The October 1980 index stood at 138.4, down from a September reading of 139.7. When compared with October 1979, the index was down 5.7%. The Nebraska economy has improved from the June 1980 low when the index stood at 135.6, but has failed to make any sustained advance from that trough.

An examination of the Nebraska economy by sector indicates the cross-currents in Nebraska's economy. The agriculture sector recorded a 13.4% decrease, while the non-agriculture sector recorded a 1% increase. All sectors except government and agriculture were up during October. This has led some observers to suggest that better days are ahead for the Nebraska economy, because the agriculture sector should show considerable improvement due to higher grain prices and the prospects for improved livestock prices.

The agriculture sector declined 13.4% in October from the September level. Cash farm marketings were down 16.3%, or nearly $94 million, on a seasonally adjusted basis September-October 1980. By contrast, cash farm marketings for the United States were up 2.7% during the same interval. Statistics may not be directly comparable with previously reported data, for cash farm marketing receipts have been revised through January 1980.

Nebraska agricultural producers recorded a 13.1% increase in prices received October 1979- (Continued on page 5)

Notes for Tables 1 and 2: (1) The "distributive" indicator represents a composite of wholesale and retail trade; transportation, communication and utilities; finance, insurance, and real estate; and selected services. (2) The "physical volume" indicator and its components represent the dollar volume indicator and its components adjusted for price changes using appropriate price indexes—see Table 5, page 5.

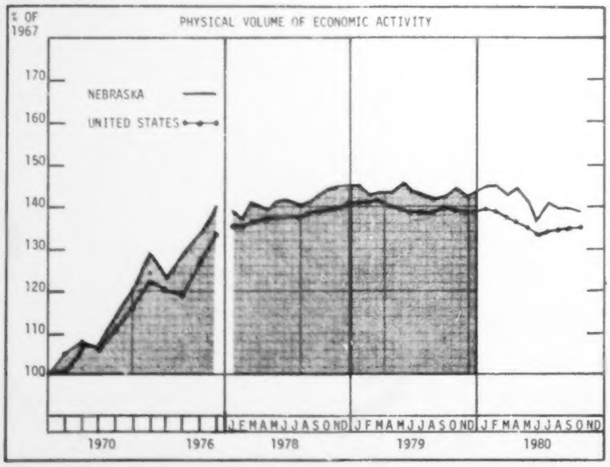
ECONOMIC INDICATORS: NEBRASKA AND UNITED STATES

1. CHANGE FROM PREVIOUS YEAR

October 1980	Current Month as Percent of Same Month Previous Year		1980 Year to Date as Percent of 1979 Year to Date	
Indicator	Nebraska	U.S.	Nebraska	U.S.
Dollar Volume	105.5	107.6	108.1	108.8
Agricultural	113.3	103.5	117.6	106.9
Nonagricultural	104.4	107.7	106.7	108.9
Construction	83.7	93.8	75.8	101.4
Manufacturing	105.7	106.6	111.6	109.3
Distributive	105.4	109.5	108.1	109.7
Government	105.6	108.2	105.4	107.2
Physical Volume	94.3	96.4	97.4	96.9
Agricultural	100.1	94.1	116.4	107.0
Nonagricultural	93.6	96.5	95.2	96.6
Construction	76.8	86.1	68.1	91.3
Manufacturing	93.4	94.7	98.6	95.4
Distributive	93.5	97.1	95.1	96.4
Government	99.6	100.9	98.4	101.7

2. CHANGE FROM 1967

Indicator	Percent of 1967 Average	
	Nebraska	U.S.
Dollar Volume	347.0	329.0
Agricultural	337.1	329.8
Nonagricultural	348.3	329.0
Construction	246.2	299.6
Manufacturing	362.4	292.7
Distributive	361.1	353.9
Government	329.6	320.7
Physical Volume	138.4	135.6
Agricultural	122.1	125.4
Nonagricultural	140.8	135.9
Construction	81.0	98.6
Manufacturing	161.2	129.9
Distributive	142.1	139.3
Government	137.3	149.9

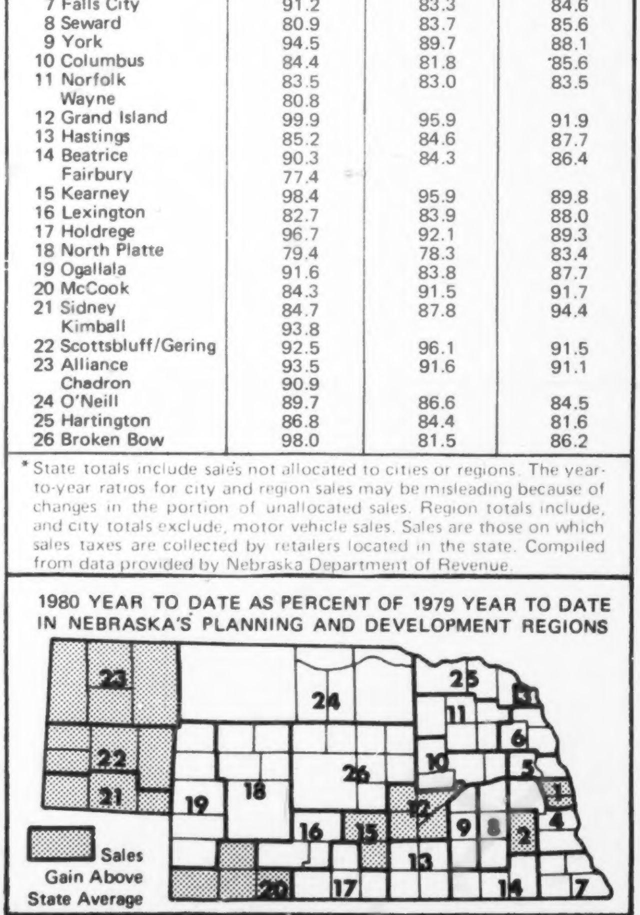


3. NET TAXABLE RETAIL SALES OF NEBRASKA REGIONS AND CITIES (Adjusted for Price Changes)

Region Number and City	City Sales*	Sales in Region*	
	Oct. 1980 as percent of Oct. 1979	Oct. 1980 as percent of October 1979	Year to date'80 as percent of Year to date'79
The State	99.5	97.1	90.7
1 Omaha	113.4	108.3	92.7
Bellevue	83.8		
2 Lincoln	105.5	103.7	92.4
3 So. Sioux City	94.3	86.6	87.6
4 Nebraska City	93.0	84.6	83.5
5 Fremont	91.7	89.3	86.3
Blair	89.2		
6 West Point	83.3	77.4	80.0
7 Falls City	91.2	83.3	84.6
8 Seward	80.9	83.7	85.6
9 York	94.5	89.7	88.1
10 Columbus	84.4	81.8	85.6
11 Norfolk	83.5	83.0	83.5
Wayne	80.8		
12 Grand Island	99.9	95.9	91.9
13 Hastings	85.2	84.6	87.7
14 Beatrice	90.3	84.3	86.4
Fairbury	77.4		
15 Kearney	98.4	95.9	89.8
16 Lexington	82.7	83.9	88.0
17 Holdrege	96.7	92.1	89.3
18 North Platte	79.4	78.3	83.4
19 Ogallala	91.6	83.8	87.7
20 McCook	84.3	91.5	91.7
21 Sidney	84.7	87.8	94.4
Kimball	93.8		
22 Scottsbluff/Gering	92.5	96.1	91.5
23 Alliance	93.5	91.6	91.1
Chadron	90.9		
24 O'Neill	89.7	86.6	84.5
25 Hartington	86.8	84.4	81.6
26 Broken Bow	98.0	81.5	86.2

*State totals include sales not allocated to cities or regions. The year-to-year ratios for city and region sales may be misleading because of changes in the portion of unallocated sales. Region totals include, and city totals exclude, motor vehicle sales. Sales are those on which sales taxes are collected by retailers located in the state. Compiled from data provided by Nebraska Department of Revenue.

1980 YEAR TO DATE AS PERCENT OF 1979 YEAR TO DATE IN NEBRASKA'S PLANNING AND DEVELOPMENT REGIONS



(Continued from page 4) October 1980. This compares with a 10.2% increase for U.S. agriculture producers over the same interval and compares very favorably with the 11.2% increase in prices paid by agriculture producers.

Nebraska's manufacturing sector recorded a 0.4% increase September-October. The index stood at 140.8 in October, up from 139.4 in September. While the index was up in October 1980, it remains below the year-previous level by more than 6%. Manufacturing employment in Nebraska was 4,000 employees less than in October 1979.

The construction sector recorded a 4.0% increase in October 1980. The index increased from 77.9 to 81.0. The construction index bottomed in June 1980 at 68.5 and has made more or less steady improvement since then.

Output in the distributive trade sector increased 1.9% in October with the index at 142.1, up from 139.5 in September 1980 (the base on the indexes was established at 100 in 1967). Like other sectors of the Nebraska economy, the distributive trade sector has rebounded from the June 1980 lows but has not shown any sustained improvement.

Output in the government sector continued to decline, with the index recording a 2.2% decrease in real output. The government index is essentially unchanged from the year previous. Little movement has been observed in the government sector over the past twelve months.

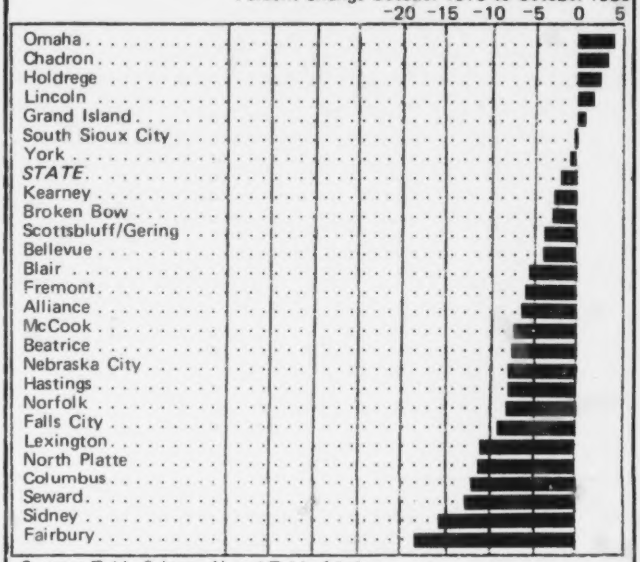
Nebraska real retail sales were down 0.2% September to October 1980. On a year-to-year basis, real retail sales are down 4.6% in Nebraska. Dollar volume sales are up, however, as inflation has pushed the general price level higher. The commodity component of the consumer price index was 240.7 in October 1980, up 11.6% from October 1979.

The geographic location of economic strength shifted somewhat in October. Omaha led all cities with a 3.9% increase in its city business index, followed by Chadron at 3.5%. Other notable gains in the city business indexes included Holdrege at 2.9% and Lincoln at 1.3%. Grand Island recorded an increase of 0.5% in October and represents the only city with an increase in its city business index in both July and October 1980.

Retail sales reflect the strength in the city business indexes. Omaha recorded a 13.4% increase in real retail sales in October 1980 compared to October 1979 and Lincoln recorded a 5.5% increase in real retail sales over the same interval. Real retail sales declined 0.1% in Grand Island. Dollar volume sales in these three cities were up substantially, since commodity price levels increased 11.6%. Other Nebraska communities where substantial dollar volume gains were recorded include Kearney and Broken Bow.

D. E. P.

CITY BUSINESS INDEXES
Percent Change October 1979 to October 1980



Source: Table 3 (page 4) and Table 4 below.

4. OCTOBER CITY BUSINESS INDICATORS

The State and Its Trading Centers	Percent of Same Month a Year Ago		
	Employment[1]	Building Activity[2]	Power Consumption[3]
The State	97.9	82.6	101.1
Alliance	97.4	50.9	103.3
Beatrice	98.5	49.5	102.4
Bellevue	98.7	214.6	94.0
Blair	97.2	85.9	108.9
Broken Bow	97.9	60.6	111.2
Chadron	97.5	153.4	162.9
Columbus	96.5	35.5	104.7
Fairbury	98.1	24.7	73.9
Falls City	98.1	35.2	99.9
Fremont	101.0	52.9	99.4*
Grand Island	97.7	131.3	102.6
Hastings	98.4	83.2	95.2
Holdrege	97.8	107.9	147.6
Kearney	98.4	76.8	98.3
Lexington	97.0	51.1	105.0
Lincoln	97.0	94.9	105.0
McCook	98.1	82.2	107.9
Nebraska City	97.7	50.8	88.3
Norfolk	96.9	65.0	118.4
North Platte	97.7	66.8	100.8
Omaha	98.7	82.8	98.9
Scottsbluff/Gering	96.2	99.4	103.2
Seward	97.4	33.7	109.1
Sidney	98.5	16.0	90.8
So. Sioux City	97.5	224.0	97.0
York	98.1	219.0	89.5

[1] As a proxy for city employment, total employment for the county in which a city is located is used.

[2] Building Activity is the value of building permits issued as spread over an appropriate time period of construction. The U.S. Department of Commerce Composite Construction Cost Index is used to adjust construction activity for price changes.

[3] Power Consumption is a combined index of consumption of electricity and natural gas except in cases marked * for which only one is used.

Source: Compilation by Bureau of Business Research from reports of private and public agencies.

5. PRICE INDEXES

October 1980	Index (1967 = 100)	Percent of Same Month Last Year	Year to Date as Percent of Same Period Last Year*
Consumer Prices	254.1	112.7	113.7
Commodity component	240.7	111.6	112.4
Wholesale Prices	277.0	112.8	114.2
Agricultural Prices			
United States	263.0	110.0	100.3
Nebraska	276.0	113.1	101.2

***Using arithmetic average of monthly indexes.**
Sources: Consumer and Wholesale Prices: U.S. Bureau of Labor Statistics; Agricultural Prices: U.S. Department of Agriculture.

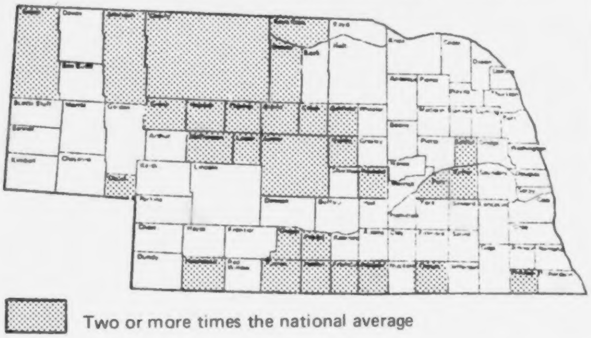
SOURCES OF NEBRASKA PERSONAL INCOME 1973-1978

Data in Table 1 (p. 3) summarize the sources of Nebraska personal income 1973-1978. Nebraska received a larger proportion of its income from dividends, interest, and rents than the national average, but had a smaller transfer payment sector, that is, Social Security payments, survivors' and disability payments, food stamps, and welfare benefits. This difference probably reflects a fundamental distinction between Nebraska and the rest of the nation—the relatively greater importance of the agriculture sector, rented land and imputed rents from owner-occupied rural housing.

Calculations for Nebraska counties were averaged over three-year intervals, and the periods 1973-1975 and 1976-1978 were compared. Because of the importance of agriculture in Nebraska, there is no such thing as an average or typical year. Furthermore, county income sources could be misleading since numbers are so small in many Nebraska counties.

An examination of the information in Table 1 and Map 1 indicates the importance of agriculture rents in Nebraska's personal income. Areas where dividends, interest, and rents are twice the national 1976-78 average appear in shaded portions of Map 1. One of the largest cities in the shaded area is Schuyler, in Colfax County. With few exceptions, dividends, interest, and rents are a more important source of personal income during the later interval than during 1973-1975.

Map 1
DIVIDENDS, INTEREST, AND RENTS
COMPARED WITH NATIONAL AVERAGE 1976-78



▨ Two or more times the national average

Nebraska's transfer payment component of personal income was below the national average. Counties with one-third above average reliance upon the transfer component of personal income are concentrated in southeastern Nebraska, southcentral Nebraska, central Nebraska, and northeastern Nebraska. The only exception to these geographic areas is Dawes County in western Nebraska.

D. E. P.

TAXES (Continued from page 2)

As noted by the author of the study:

> As a nation, America seems to have moved too far toward the security of equality to turn back toward total freedom. But it is nevertheless essential to recognize that the dream of the free market remains enticing for most Americans. While there is no evidence that the country is willing to risk the security it possesses in order to realize that dream, there is also no convincing evidence that it would act conclusively and irrevocably to shut off all chances of ever realizing it.[6]

This ambivalent attitude toward the free market makes structural reform a slow and problematical process at best. The temptation is great to search for short-run remedies to market failure which seemingly avoid the painful adjustments of fundamental reform. But I suspect that sooner or later fundamental reform must be embraced.

ROBERT F. ALLEN*

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[6] Ibid., p. 103.

*Professor of Economics, Air Force Institute of Technology.

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REVIEW OF POPULATION ESTIMATES AND PROJECTIONS FOR NEBRASKA COUNTIES

Population projections and estimates have been published by the College of Business Administration's Bureau of Business Research at periodic intervals throughout the past decade. The projections were produced by the Bureau of Business Research (BBR) in 1973 and updated in 1976 to fill the needs of population data users involved in the planning of future needs for various facilities within the state.

The population projections used in this analysis are those published by BBR in 1976 in *Nebraska Population Projections II.* Since they comprise a comprehensive, statewide set of statistics produced in a systematic manner, these county projections have been widely used by planners and decision makers. The county projections were keyed to the projected state growth patterns published in the same volume, and relied heavily on past growth patterns of counties. A ratio of county to state allocation method was used.

Since the 1970 Census of Population and Housing, population estimates at the state and county level have been produced yearly by BBR in conjunction with the U.S. Bureau of the Census under the auspices of the Federal-State Cooperative Program for population estimates. An advantage of these estimates lies in the nationwide standardization of the techniques utilized. At the same time, this advantage belies an inherent disadvantage of the estimation techniques employed because Nebraska is a sparsely populated state and thus does not reflect many of the population patterns which characterize other states in the nation.

It is useful to both producers and users of the estimates and projections to know how accurately the techniques used reflect actual population changes which have occurred throughout the state in the past decade. With the availability of recent population counts it is possible to evaluate the accuracy of these estimates and projections. This review will focus on comparisons of the preliminary 1980 census counts at the state and county level to (1) medium series 1980 population projections at the state and county level produced by BBR, and (2) 1979 state and county population estimates produced under the auspices of the Federal-State Cooperative Program.

A ratio analysis was conducted to assess how accurately the 1980 projections and the 1979 estimates reflected actual population changes. The 1980 census figure was used as the denominator when calculating the ratios. Thus, if the ratio was greater than one it meant the population projection or estimate was higher than the 1980 census figure. In turn, if the ratio was less than one it indicated the population projection or estimate was less than the actual 1980 census figure. If the ratio equaled one the population projection or estimate was exactly the same as the 1980 census count. While in reality only one county (Merrick) had a population projection equal to the 1980 census figure, the ratios for many of the estimates and projections that were close to the 1980 census counts came out to be one due to rounding. The 1980 census figures, 1980 projections, 1979 estimates, and their corresponding ratios appear in Table 1 (p. 2).

For the state as a whole, both the 1980 projection and the 1979 estimate were higher than the 1980 census figure—indicating a faster rate of growth than actually occurred. The 1980 projection was 0.8 percent higher than the 1980 census figure and the 1979 estimate was 0.3 percent higher. Although the 1979 estimate is for nine months prior to the census date, there is little reason to suspect that this number would have changed much in that time. Both the projection and the estimate represent a very accurate estimate of Nebraska's population.

For projections at the county level, 36 (or 38.7 percent) of the counties had a projected population higher than the 1980 census, 56 (or 60.2 percent) had a projected population lower than the 1980 census, and 1 (or 1.1 percent) had a projected population equal to the 1980 census. In cases where the 1980 county projections were higher than the 1980 census figures, the largest discrepancies occurred for Arthur, Dodge, Douglas, Kimball, and Wayne counties. A slower rate of population decline was projected for Arthur and Kimball counties than actually occurred. In contrast to the increase in population projected for Wayne County, a decline in its population occurred from 1970 to 1980. This discrepancy is not surprising, given the erratic pattern of population growth and decline experienced by Wayne County from 1930 through 1980. The projections indicated a faster rate of population increase for Dodge and Douglas counties than actually occurred. This is consistent with the general trend depicted by the 1980 census of a slower rate of growth in metropolitan areas.

Nine Nebraska counties experienced considerably faster rates of growth than were projected. These are Box Butte, Brown, Chase, Lincoln, Morrill, Perkins, Rock, Sheridan, and Stanton counties. All of these counties, except Lincoln County, experienced a reversal of population declines exhibited previously. These discrepancies accurately reflect a weakness inherent to population projections—which is that they are largely based on past population trends. As a result, projections are unable to reflect changes in extraneous influences, such as economic factors, which are likely to affect population developments

(continued on page 6)

Table 1
COMPARISON OF 1980 PRELIMINARY CENSUS FIGURES WITH 1980 PROJECTIONS AND 1979 ESTIMATES FOR NEBRASKA COUNTIES

County	1980 Census[1]	1980 Projection	1979 Estimate	Ratio of '80 Projection to '80 Census	Ratio of '79 Estimate to '80 Census
Adams	30,643	32,293	29,939	1.05	0.98
Antelope	8,688	8,345	8,971	0.96	1.03
Arthur	509	557	556	1.09	1.09
Banner	918	929	912	1.01	0.99
Blaine	859	811	867	0.94	1.01
Boone	7,383	7,611	7,372	1.03	1.00
Box Butte	13,688	9,465	13,154	0.69	0.96
Boyd	3,321	3,365	3,358	1.01	1.01
Brown	4,351	3,734	4,293	0.86	0.99
Buffalo	34,757	34,510	34,267	0.99	0.99
Burt	8,806	8,429	8,430	0.96	0.96
Butler	9,321	8,674	9,063	0.93	0.97
Cass	20,027	19,210	20,504	0.96	1.02
Cedar	11,357	10,988	11,515	0.97	1.01
Chase	4,749	3,827	4,855	0.81	1.02
Cherry	6,753	6,405	6,571	0.95	0.97
Cheyenne	10,024	10,327	10,427	1.03	1.04
Clay	8,124	8,165	7,777	1.01	0.96
Colfax	9,873	9,313	9,724	0.94	0.98
Cuming	11,669	11,976	11,994	1.03	1.03
Custer	13,827	12,979	13,573	0.94	0.98
Dakota	16,542	15,494	16,789	0.94	1.01
Dawes	9,639	10,078	9,101	1.05	0.94
Dawson	22,138	20,445	22,297	0.92	1.01
Deuel	2,452	2,496	2,420	1.02	0.99
Dixon	7,136	6,831	7,097	0.96	0.99
Dodge	35,851	38,935	35,662	1.09	0.99
Douglas	395,028	428,936	412,195	1.09	1.04
Dundy	2,830	2,660	2,739	0.94	0.97
Fillmore	7,899	7,506	8,112	0.95	1.03
Franklin	4,366	4,033	4,570	0.92	1.05
Frontier	3,645	3,709	3,992	1.02	1.10
Furnas	6,476	6,130	6,465	0.95	1.00
Gage	24,451	25,193	23,320	1.03	0.95
Garden	2,806	2,697	2,792	0.96	1.00
Garfield	2,359	2,202	2,593	0.93	1.10
Gosper	2,136	2,001	2,670	0.94	1.25
Grant	882	937	845	1.06	0.96
Greeley	3,448	3,644	3,744	1.06	1.09
Hall	47,651	47,709	46,779	1.00	0.98
Hamilton	9,226	9,051	9,038	0.98	0.98
Harlan	4,268	3,926	4,399	0.92	1.03
Hayes	1,370	1,406	1,501	1.03	1.10
Hitchcock	4,079	3,681	4,176	0.90	1.02
Holt	13,543	12,127	13,046	0.90	0.96
Hooker	985	969	986	0.98	1.00
Howard	6,719	6,764	6,919	1.01	1.03
Jefferson	9,818	9,623	10,138	0.98	1.03
Johnson	5,261	5,273	5,443	1.00	1.03
Kearney	7,013	6,760	6,851	0.96	0.98
Keith	9,339	8,816	10,142	0.94	1.09
Keya Paha	1,296	1,292	1,260	1.00	0.97
Kimball	4,880	5,478	4,813	1.12	0.99
Knox	11,456	10,705	11,070	0.93	0.97
Lancaster	192,718	198,917	186,481	1.03	0.97
Lincoln	36,422	32,499	37,388	0.89	1.03
Logan	979	1,017	1,062	1.04	1.08
Loup	853	894	954	1.05	1.12
Madison	31,419	30,384	30,316	0.97	0.96
McPherson	593	616	635	1.04	1.07
Merrick	8,946	8,946	8,566	1.00	0.96
Morrill	6,132	5,462	6,048	0.89	0.99
Nance	4,746	4,634	4,668	0.98	0.98
Nemaha	8,377	8,618	7,990	1.03	0.95
Nuckolls	6,738	6,806	6,652	1.01	0.99
Otoe	15,124	15,566	15,097	1.03	1.00
Pawnee	3,926	3,897	4,036	0.99	1.03
Perkins	3,626	3,166	3,636	0.87	1.00
Phelps	9,713	9,724	10,045	1.00	1.03
Pierce	8,479	8,475	8,485	1.00	1.00
Platte	28,842	28,731	28,687	1.00	0.99
Polk	6,338	5,923	6,213	0.93	0.98
Red Willow	12,611	12,473	12,702	0.99	1.01
Richardson	11,126	11,152	11,030	1.00	0.99
Rock	2,357	2,083	2,528	0.88	1.07
Saline	13,029	13,351	13,072	1.02	1.00
Sarpy	84,933	81,929	88,156	0.96	1.04
Saunders	18,749	17,502	17,723	0.93	0.95
Scotts Bluff	38,150	39,620	37,812	1.04	0.99
Seward	15,733	15,351	15,278	0.98	0.97
Sheridan	7,563	6,790	7,214	0.90	0.95
Sherman	4,219	4,332	4,369	1.03	1.04
Sioux	1,839	1,926	2,006	1.05	1.09
Stanton	6,531	5,862	6,409	0.90	0.98
Thayer	7,566	7,040	7,393	0.93	0.98
Thomas	972	969	1,155	1.00	1.19
Thurston	7,192	6,666	6,947	0.93	0.97
Valley	5,631	5,273	5,351	0.94	0.95
Washington	15,515	15,681	15,622	1.01	1.01
Wayne	9,706	10,841	9,542	1.12	0.98
Webster	4,862	4,812	4,874	0.99	1.00
Wheeler	1,056	1,054	1,085	1.00	1.03
York	14,781	14,020	14,630	0.95	0.99
Nebraska	1,570,006[2]	1,582,422	1,573,943	1.01	1.00

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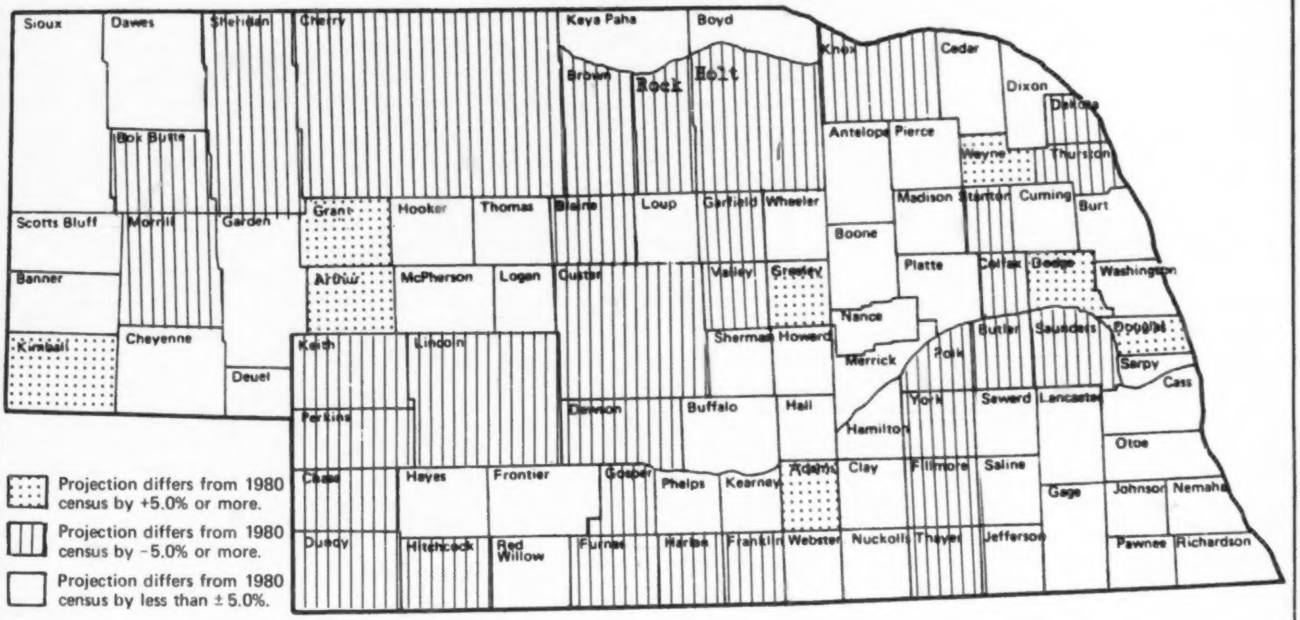
[1] Preliminary, subject to revision.

[2] Nebraska's population contains 5,279 persons who cannot at this time be allocated to regions, counties, or cities.

Figure 1
COUNTIES FOR WHICH 1980 PROJECTIONS HAD A 5.0 PERCENT OR MORE DEVIATION FROM THE 1980 CENSUS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Thomas
Blaine
Loup
Garfield
Wheeler
Madison
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Cuming
Burt
Boone
Banner
Arthur
McPherson
Logan
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Dodge
Washington
Nance
Kimball
Cheyenne
Keith
Lincoln
Sherman
Howard
Butler
Saunders
Douglas
Merrick
Polk
Sarpy
Deuel
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Dawson
Buffalo
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York
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Hamilton
Otoe
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Hayes
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Gosper
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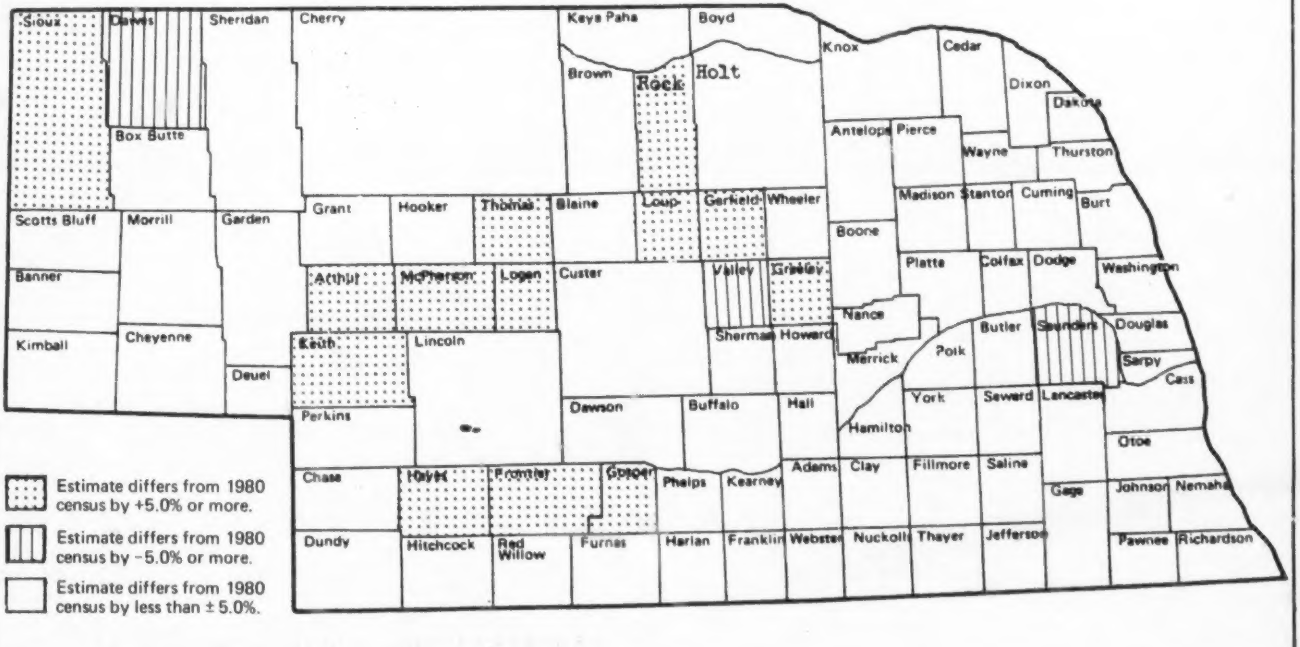
Clay
Fillmore
Saline
Gage
Johnson
Nemaha
Dundy
Hitchcock
Red Willow
Furnas
Harlan
Franklin
Webster
Nuckolls
Thayer
Jefferson
Pawnee
Richardson
Projection differs from 1980 census by +5.0% or more.
Projection differs from 1980 census by −5.0% or more.
Projection differs from 1980 census by less than ± 5.0%.

Figure 2
COUNTIES FOR WHICH 1979 ESTIMATES HAD A 5.0 PERCENT OR MORE DEVIATION FROM THE 1980 CENSUS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Estimate differs from 1980 census by +5.0% or more.
Estimate differs from 1980 census by −5.0% or more.
Estimate differs from 1980 census by less than ± 5.0%.

Review and Outlook

November 1980 was another month of little change in the Nebraska economy. Major economic indicators for the state suggest a slight increase in real output. The non-agricultural index of physical volume output was up 0.3% in November over the October 1980 level, but caution is advised in interpreting these data for cash farm marketings for Nebraska and the United States were unavailable when this article was written.[1] The increase in the non-agricultural component of the state's economy was led by advances in construction and manufacturing.

While cash farm marketing receipts were not available, note that prices received by Nebraska farmers increased 3.3% in November over month-earlier levels, compared with 4.6% nationally on a seasonally adjusted basis. Unadjusted prices were down -1.1%, compared with a 1.5% increase nationally. On a year-to-year basis (November 1979-November 1980), prices received by Nebraska farmers were up 11.8%, compared with 10.9% nationally. Prices paid by farmers increased 12% over this same interval.

One of the stronger sectors of the Nebraska economy during November 1980 was the construction sector. This index was up 2.7% above the October level, although it remains well below the year-previous level. The construction sector, like other elements of the Nebraska economy, apparently (continued on page 5)

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[1] The chart at the bottom of the page estimates physical volume by using changes in the non-agricultural sectors only, and will be revised when cash farm marketing data are available.

Notes for Tables 1 and 2: (1) The "distributive" indicator represents a composite of wholesale and retail trade; transportation, communication and utilities; finance, insurance, and real estate; and selected services. (2) The "physical volume" indicator and its components represent the dollar volume indicator and its components adjusted for price changes using appropriate price indexes—see Table 5, page 5.

ECONOMIC INDICATORS: NEBRASKA AND UNITED STATES

1. CHANGE FROM PREVIOUS YEAR

November 1980	Current Month as Percent of Same Month Previous Year		1980 Year to Date as Percent of 1979 Year to Date	
Indicator	Nebraska	U.S.	Nebraska	U.S.
Dollar Volume	NA	NA	NA	NA
Agricultural	NA	NA	NA	NA
Nonagricultural	105.0	108.5	106.6	108.8
Construction	87.9	96.8	76.8	101.0
Manufacturing	108.4	108.9	111.3	109.3
Distributive	105.4	109.4	107.9	109.7
Government	103.9	108.2	105.3	107.3
Physical Volume	NA	NA	NA	NA
Agricultural	NA	NA	NA	NA
Nonagricultural	94.2	97.3	95.1	96.7
Construction	79.9	88.0	69.1	91.0
Manufacturing	96.1	97.0	98.3	95.6
Distributive	93.6	97.2	95.0	96.5
Government	98.3	101.0	98.4	101.6

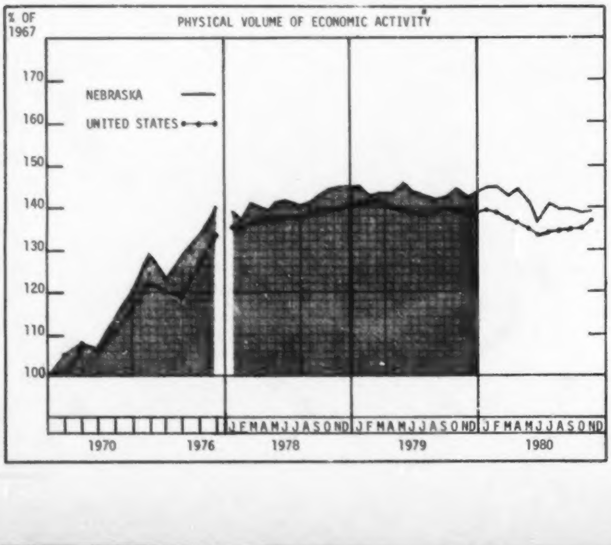
2. CHANGE FROM 1967

Indicator	Percent of 1967 Average	
	Nebraska	U.S.
Dollar Volume	NA	NA
Agricultural	NA	NA
Nonagricultural	351.5	334.5
Construction	254.5	308.6
Manufacturing	371.1	299.9
Distributive	362.7	359.0
Government	330.8	322.6
Physical Volume	NA	NA
Agricultural	NA	NA
Nonagricultural	141.1	137.2
Construction	82.6	100.2
Manufacturing	163.9	132.5
Distributive	141.6	140.1
Government	137.2	150.3

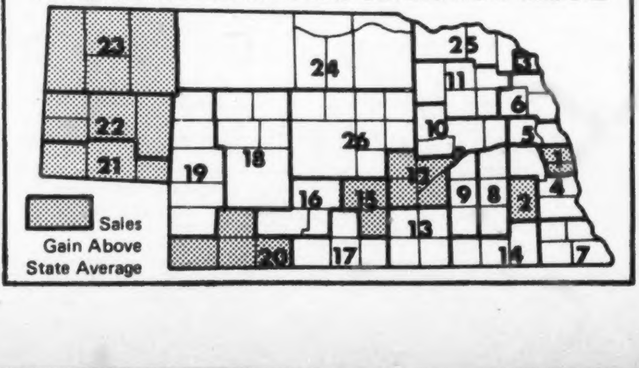
3. NET TAXABLE RETAIL SALES OF NEBRASKA REGIONS AND CITIES (Adjusted for Price Changes)

Region Number and City	City Sales*	Sales in Region*	
	Nov. 1980 as percent of Nov. 1979	Nov. 1980 as percent of Nov. 1979	Year to date'80 as percent of Year to date'79
The State	94.7	93.7	91.0
1 Omaha	91.5	91.5	92.6
Bellevue	93.8		
2 Lincoln	99.9	98.4	93.0
3 So. Sioux City	97.5	90.4	87.9
4 Nebraska City	93.3	89.5	84.0
5 Fremont	88.7	86.8	86.3
Blair	85.1		
6 West Point	82.4	91.2	80.9
7 Falls City	92.8	87.3	84.9
8 Seward	93.9	87.8	85.8
9 York	82.3	82.3	87.6
10 Columbus	89.7	89.2	85.9
11 Norfolk	89.6	88.2	83.9
Wayne	89.0		
12 Grand Island	93.9	90.9	91.8
13 Hastings	94.6	95.5	88.4
14 Beatrice	92.2	92.3	86.9
Fairbury	83.6		
15 Kearney	99.4	99.6	90.7
16 Lexington	88.2	90.9	88.2
17 Holdrege	90.9	88.9	89.3
18 North Platte	88.1	84.3	83.5
19 Ogallala	86.1	99.2	88.6
20 McCook	95.6	93.7	91.9
21 Sidney	103.8	90.8	94.1
Kimball	80.4		
22 Scottsbluff/Gering	98.4	101.8	92.4
23 Alliance	92.6	91.5	91.1
Chadron	86.1		
24 O'Neill	94.1	90.4	85.0
25 Hartington	81.1	88.7	82.3
26 Broken Bow	105.5	93.2	86.8

*State totals include sales not allocated to cities or regions. The year-to-year ratios for city and region sales may be misleading because of changes in the portion of unallocated sales. Region totals include, and city totals exclude, motor vehicle sales. Sales are those on which sales taxes are collected by retailers located in the state. Compiled from data provided by Nebraska Department of Revenue.



1980 YEAR TO DATE AS PERCENT OF 1979 YEAR TO DATE IN NEBRASKA'S PLANNING AND DEVELOPMENT REGIONS



(continued from page 4)

bottomed in June 1980 and has been slowly increasing since then.

Nebraska's manufacturing sector recorded a gain of 1.7% in November 1980, compared with October 1980. The index has moved up 2.6% since the June 1980 lows but, like the construction sector, this segment of the economy remains below year-previous levels. The November increases in the manufacturing and construction sectors were the first substantial increases in these sectors since the July rebound and may indicate that the Nebraska economy is poised for further advances.

While construction and manufacturing recorded monthly increases, output in the distributive sector declined 0.2%. Physical volume output in the distributive sector has changed little since the July 1980 increase. The index for the distributive sector stands at 141.6, down from 141.8 recorded in July 1980. It is above the 1980 lows but remains below November 1979 levels.

Once again the government sector recorded no change in output. The index was unchanged at 137.2, which is less than 2% below the November 1979 level.

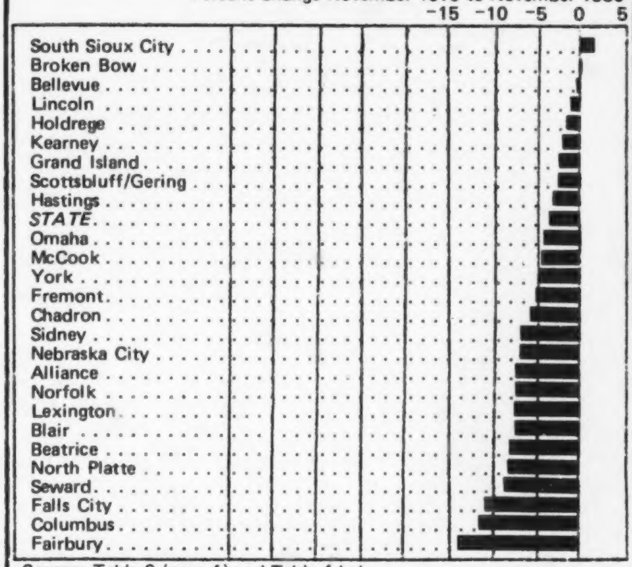
Retail sales in Nebraska continued their lackluster performance in November 1980. Unadjusted for price changes, non-motor vehicle sales were up 5.6%. Motor vehicle sales have been very slow nationally, and in Nebraska were down 6.2% on a dollar volume basis November 1979 to November 1980. Combined retail sales were up 4.5% on an unadjusted or dollar volume basis.

Considering the serious distortions in the consumer price index (CPI), it is questionable how meaningful are price adjustments using this deflator. Recent discussion has centered on the distortions introduced by weighting more heavily the rapidly rising components of the index and the influence of interest rates on the housing component of the consumer price index. Deflating by using the commodity component of the consumer price index removes the problem of housing, but does not make allowance for the fact that more rapidly rising goods are more heavily weighted in the index. The commodity component of the consumer price component increased 11.5% November 1979 - November 1980.

Using the commodity component of the CPI to deflate Nebraska retail sales, total retail sales were down 6.3%. Non-motor vehicle sales were down 5.3% and motor vehicle sales were down 15.9% in price adjusted terms.

Retail sales were notably strong in Broken Bow where the index recorded a 5.5% increase in real retail sales, and in Sidney where a 3.8% increase in real retail sales was recorded. Lincoln and Kearney recorded real retail sales nearly equivalent to those of the previous year. Similar strength in retail sales was also noted in the Scottsbluff/Gering area and South Sioux City. D. E. P.

CITY BUSINESS INDEXES
Percent Change November 1979 to November 1980



Source: Table 3 (page 4) and Table 4 below.

4. NOVEMBER CITY BUSINESS INDICATORS

The State and Its Trading Centers	Percent of Same Month a Year Ago		
	Employment[1]	Building Activity[2]	Power Consumption[3]
The State	98.5	85.3	95.5
Alliance	97.3	54.9	102.1
Beatrice	99.1	42.1	95.5
Bellevue	98.8	188.1	98.2
Blair	98.0	100.0	107.2
Broken Bow	98.5	70.5	88.3
Chadron	97.2	145.3	95.0
Columbus	97.3	32.4	99.2
Fairbury	98.9	26.0	85.2
Falls City	98.9	25.0	100.8
Fremont	106.0	56.6	101.3*
Grand Island	98.1	123.6	106.3
Hastings	99.4	88.6	86.7
Holdrege	98.6	191.4	84.4
Kearney	98.9	77.4	90.9
Lexington	97.9	76.7	62.2
Lincoln	97.0	104.4	96.9
McCook	98.4	64.9	96.8
Nebraska City	98.8	47.9	89.9
Norfolk	97.9	67.6	97.5
North Platte	98.7	61.6	89.5
Omaha	98.8	95.6	97.6
Scottsbluff/Gering	95.4	104.3	96.7
Seward	97.1	39.6	85.2
Sidney	99.3	17.4	94.5
So. Sioux City	98.8	191.4	84.4
York	98.9	203.2	81.4

[1] As a proxy for city employment, total employment for the county in which a city is located is used.

[2] Building Activity is the value of building permits issued as spread over an appropriate time period of construction. The U.S. Department of Commerce Composite Construction Cost Index is used to adjust construction activity for price changes.

[3] Power Consumption is a combined index of consumption of electricity and natural gas except in cases marked * for which only one is used.

Source: Compilation by Bureau of Business Research from reports of private and public agencies.

5. PRICE INDEXES

November 1980	Index (1967 = 100)	Percent of Same Month Last Year	Year to Date as Percent of Same Period Last Year*
Consumer Prices	256.2	112.6	113.6
Commodity component	242.5	111.5	112.3
Wholesale Prices	278.4	112.6	114.2
Agricultural Prices			
United States	275.0	110.9	101.2
Nebraska	285.0	111.8	102.2

*Using arithmetic average of monthly indexes.
Sources: Consumer and Wholesale Prices: U.S. Bureau of Labor Statistics; Agricultural Prices: U.S. Department of Agriculture.

(continued from p. 1)

in a particular locale. For example, it is impossible to forecast with accuracy the impact of Burlington Northern on Alliance (which affects Box Butte County), or the building of a power plant in Sutherland on Lincoln County. Projection techniques have not yet achieved this degree of sophistication.

The largest discrepancies between the 1979 estimates and the 1980 census for cases in which the estimate was higher than the census figure occurred for Arthur, Frontier, Garfield, Gosper, Greeley, Hayes, Keith, Logan, Loup, Sioux, and Thomas counties. Eight of these 11 counties—Arthur, Garfield, Gosper, Hayes, Logan, Loup, Sioux, and Thomas—have a 1980 population of 2,500 or less. Estimates for such sparsely populated areas typically are characterized as having a larger error than estimates for more densely populated areas. No cases occurred in which the 1979 estimates were substantially lower than the 1980 census figures.

Figures 1 and 2 (p. 3) illustrate counties which had projections and estimates with a ±5.0 percent or more deviation from the 1980 census. The greater accuracy of the estimates—in comparison to the projections—is reflected in these maps. For the 1979 estimates, only 16 counties, or 17.2 percent of all Nebraska counties, had a ±5.0 percent or more difference between the estimate and the 1980 census figure. As would be expected—given the difficulties inherent in estimating the population for sparsely populated areas—13 of these 16 counties (all but Dawes, Saunders, and Valley counties) registered a 1980 population of less than 2,500 people. As producers of population estimates are well aware, there is an inverse relationship between county population size and accuracy of the estimates.

Forty-one, or 44.1 percent, of all Nebraska counties had a ±5.0 percent or more deviation between the 1980 projection and 1980 census figure. This is a considerably larger number of counties with a ±5.0 percent or more deviation than occurred for the 1979 estimates. Fifteen of the 41 counties that had a ±5.0 percent or more difference between the projection and census figure experienced a recent reversal of previous population declines. Rather than continuing to lose population throughout the 1970s, these counties had gained population. While 17, or 41.5 percent, of these 41 counties continued to lose population in the last decade, the decline had occurred at a slower rate.

Since projections are based on assumptions derived from past population trends for an area and would not be as sensitive as estimates (which are based on data representing people, such as births, deaths, school enrollment, social security recipients, and so on) to current population developments, the large number of counties displaying a greater than 5.0 percent difference between the projected and census figure is not surprising. The 1980 projections did not as accurately reflect, as did the 1979 estimates, the increasing population stability which occurred in Nebraska throughout the 1970s. As indicated by the 1980 census figures, however, both the estimates and projections were very accurate in denoting population trends in Nebraska.

The inverse relationship between county population size and the accuracy of the estimates is illustrated in Table 2. While there is little deviation between the accuracy of the 1980 projections for counties with a population of 50,000 or less, there is a substantial difference between the accuracy of estimates for counties of 2,500 or more and counties of 2,500 or less. The percent deviation of estimates for sparsely populated areas versus that for more densely populated areas, as depicted in this table, is consistent with the average deviations between estimates and census counts for such areas found by demographers.[1]

Table 2
ACCURACY OF PROJECTIONS AND ESTIMATES
FOR NEBRASKA COUNTIES CLASSIFIED BY SIZE

County Population	Ratio of '80 Projection to '80 Census	Ratio of '79 Estimate to '80 Census	Percent Difference '80 Projection to '80 Census	Percent Difference '79 Estimate to '80 Census
2,500 or less	0.9886	1.0723	−1.1	7.2
2,501 to 10,000	0.9710	0.9963	−2.9	−0.4
10,001 to 50,000	0.9317	0.9905	−1.8	−1.0
Over 50,000	1.0552	1.0210	5.5	2.1

Overall, the estimates and projections represent a very accurate estimate of Nebraska's population. While it should be remembered that the 1980 census counts used in this review are preliminary and are subject to change, it is expected that these adjustments will not substantially change the apparent accuracy of the projections and estimates.

A. M. R.

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[1] Panel on Small-Area Estimates of Population and Income, *Estimating Population and Income of Small Areas* (Washington, D.C.: National Academy Press, 1980).

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Prepared by the Bureau of Business Research
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A REVIEW OF NEBRASKA'S CONSTRUCTION INDUSTRY

The construction industry plays an important role in Nebraska's economy. In 1980, construction employment averaged 31,600 persons. This amounted to 5.0 percent of the nonagricultural wage and salary employment in the state. In addition, an estimated $840 million in construction contracts were issued in 1980.

There are numerous indicators of economic activity in the construction industry. Several of the more readily available are presented in Table 1. Besides employment, data for personal earnings, current dollar gross state product (GSP), and constant dollar GSP are shown for the years 1970-1980. Personal earnings consist of both labor and proprietors' income. Gross state product reflects the net result of economic activity and is defined as the dollar value of all final goods and services produced by the construction industry in Nebraska during a year. Constant (real) dollar figures are obtained by using the appropriate national deflator.

Table 1
INDICATORS OF CONSTRUCTION ACTIVITY IN NEBRASKA

Year	Personal Earnings (millions of $)	Employment (average monthly)	GSP (millions of current $)	Real GSP (millions of 1972 $)
1970	289	24,600	330.8	392.2
1971	303	23,900	344.5	374.8
1972	349	26,900	394.8	394.8
1973	391	29,200	456.4	411.9
1974	430	29,800	494.6	409.4
1975	442	28,100	518.1	381.2
1976	524	30,300	611.3	441.3
1977	569	32,300	672.6	456.0
1978	638	33,000	735.2	456.7
1979	651	33,400	680.0	387.0
1980	638*	31,600	NA	NA

*Estimate based on first three quarters of 1980.

Sources: U.S. Department of Commerce, Nebraska Department of Labor, and computations by the Bureau of Business Research.

The construction industry in Nebraska appears to have experienced some long-term growth and seems to be sensitive to changes in general business activity, as evidenced by the variability of the data series contained in Table 1. The two series for which data are available (personal earnings and employment) show that 1980 was a poor year for construction, as both series declined from 1979.

The drop in personal earnings was the only drop in earnings during the eleven-year period, 1970-1980. Throughout this period, earnings in the construction industry averaged 6.7 percent of all earnings generated in the state and averaged 7.7 percent of nonagricultural earnings. Construction's relative share for 1980 will apparently be the lowest in more than a decade.

Employment, too, experienced a decline. The most recent peak (33,400) was recorded in 1979, and 1980's figure is down nearly 2,000 employees from that level and is the lowest since 1976. Because the measurement of employment is not directly affected by price level changes as are personal earnings, employment has experienced several dips since 1970. The most severe occurred in 1980, but others occurred in 1971 and 1975. Employment rebounded quickly following the two earlier declines, and it will be interesting to see if construction employment can rebound in a similar manner in 1981.

Throughout the eleven-year period covered in Table 1, employment averaged 5.2 percent of the nonagricultural wage and salary employment in the state. Only in 1971 was construction's share of employment smaller than that of 1980.

Of the two remaining measures of construction activity, real GSP will be highlighted because it excludes the influence of prices and allows for a more accurate year-to-year comparison. Although 1980 data are unavailable for both GSP series, it is reasonable to assume—based upon the experience in employment and earnings—that they also will decline.

Real GSP shows four declining years during the 1970s, with consecutive drops in 1974 and 1975. The highest level of GSP was recorded in 1978 and the lowest in 1971, but it is very likely that 1980 may be a new low.

As a percent of total GSP, construction averaged 4.7 percent between 1970-1979. It also averaged 5.4 percent of nonagricultural GSP over the same period. Construction's relative share of total GSP was the lowest in 1979, amounting to only 3.7 percent.

The cyclical aspect of the construction industry is not only apparent in earnings, employment, and GSP data, it is also readily apparent in the number and value of building permits issued. Table 2 (p. 2) presents statistics on residential construction authorized by building permits and by public contracts, as compiled by the U.S. Department of Commerce. Two important caveats should be noted before interpreting these data. First, the data are based on a sample of permit-issuing places, the number of which has increased since 1970. This results in an understatement of the actual number and value of residential construction. Second, not all building authorized by permits is actually undertaken. Therefore, the data should be viewed as the best available estimates, subject to the limitations mentioned previously.

It must also be remembered that

(continued on page 2)

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(continued from page 1)

although residential building is important (40 percent of all construction between 1970 and 1980), nonresidential building and nonbuilding construction (such as highways, bridges, etc.) amount to a sizable portion of Nebraska's construction. Residential construction also tends to fluctuate more than the other types of construction because of the relatively short time needed for completion of a project and its dependence on the cost and availability of financing. Nonresidential building and nonbuilding construction, on the other hand, are more stable and less sensitive to interest rates and availability of funds.

Table 2 presents the number of units, the current value, and real value of residential building authorized in Nebraska by building permit and public contracts for the years 1970-1980. Total residential building is further divided into total private construction and private construction consisting of only one unit. Typically, total construction consists solely of private construction, and for those years with some public construction it is usually relatively small.

In looking at the total number of units authorized, it becomes apparent that the number of units fluctuates considerably from year to year with no discernible long-term trend. In addition, it appears that 1980 was a disaster in terms of residential construction. Total number of units peaked in 1972 at 13,556 units, dropped to a low in 1974, and then climbed steadily until reaching a smaller peak in 1977. Since then, the number of units has fallen rapidly, as the 7,144 units authorized for construction in 1980 were the fewest since 1974.

During the 1970s, the composition of residential construction changed. In the early 1970s, single units amounted to approximately one-half of all construction, but in the last part of the decade and continuing into 1980, single units comprised about three-fourths of all construction. Single-unit construction has exhibited similar fluctuations, with highs in 1972 and 1977 and a low in 1974, but the decade high occurred in 1977 rather than 1972.

Both current value and real value of authorized building have followed a cycle similar to the number of units. The only difference was that total current value reached its peak in 1978 rather than 1977.

In 1980, the value of residential building amounted to $230 million, but fell 16.8 percent from 1979. This drop represented the largest fall in value during the eleven-year period beginning in 1970. The value of single units was $189 million, representing an 18.9 percent decline from 1979 and the largest decline over the eleven-year period.

The extent of the current slump in construction is best exemplified by the real value of residential building. For all three types of construction presented in Table 2, the real value in 1980 was approximately three-fourths of what it was the previous year and slightly more than half the 1977 value. In other words, in just three years the real value of construction has fallen nearly 50 percent.

The forecast for 1981, however, is one of cautious optimism. Even though residential construction may not attain the levels of 1979, 1981 is expected to be no worse than 1980 and probably a slight improvement.

To summarize, it appears that Nebraska's construction activity during the years 1970-1980 has shown some growth, but was subject to severe fluctuations. Currently, the industry is in one of its slumps that may have bottomed out in 1980.

THE CENSUSES OF CONSTRUCTION INDUSTRIES

The previous section reviewed some of the end results of the construction industry (output, earnings, and employment). This section will tend to focus in more detail on the structure of the industry by using data found in the quinquennial *Census of Construction Industries* prepared by the U.S. Bureau of the Census.

The 1977 *Census of Construction Industries* indicated that there were 13,132 establishments in Nebraska which operated primarily as general contractors or operative builders, special trade contractors, or subdividers and developers. These establishments had total receipts of $2.1 billion and an average payroll of 35,975 employees[1] during 1977. In addition to these payroll

Table 2

RESIDENTIAL BUILDING AUTHORIZED IN NEBRASKA BY BUILDING PERMITS AND PUBLIC CONTRACTS

	Number of Units			Value (thousands of $)			Real Value* (thousands of 1972 $)		
Year	Total	Total Private	1-Unit	Total	Total Private	1-Unit	Total	Total Private	1-Unit
1970	8,014	7,689	4,342	89,667	85,771	61,753	100,524	96,156	69,230
1971	13,156	13,059	6,230	141,071	139,454	88,484	149,440	147,727	93,733
1972	13,556	13,556	6,625	165,887	165,887	110,257	165,721	165,721	110,037
1973	10,207	10,207	6,139	146,793	146,793	108,617	133,205	133,205	98,743
1974	7,019	7,019	4,773	123,033	123,033	99,714	101,345	101,345	82,002
1975	7,927	7,927	6,585	163,970	163,970	146,131	124,314	124,314	110,705
1976	10,528	10,528	8,241	225,568	225,568	195,297	158,963	158,963	137,630
1977	11,322	11,322	8,788	287,043	287,043	249,425	179,402	179,402	155,891
1978	10,937	10,937	8,370	289,575	289,575	245,996	159,546	159,546	135,535
1979	8,785	8,735	6,601	277,221	275,124	233,195	135,230	134,207	113,809
1980	7,144	6,980	5,269	230,530	222,671	189,232	101,734	98,266	83,509

*Price index imputed from current and real dollar values published in various issues of *Value of New Construction Put in Place,* U.S. Department of Commerce, Bureau of the Census, Construction Reports, C30.

Source: *Housing Units Authorized by Building Permits and Public Contracts,* U.S. Department of Commerce, Bureau of the Census, Construction Reports, C40.

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[1] Employment is the average for pay periods including the 12th of March, May, August, and November, and includes all employees of a construction firm.

employees, 11,654 proprietors and working partners received incomes from construction establishments.

The 1977 *Census of Construction Industries* is a part of the 1977 economic censuses. The census divides construction firms into employers (firms with payroll) and nonemployers (firms without payroll). Statistical information for the employers was obtained by a survey which included all medium and large size employers and a sample of the smaller ones. Since census reports were not required from the nonemployers, statistics on them were obtained from administrative records of the federal government.

The nonemployer establishments were the most numerous, and totaled 8,186 establishments (see Table 3). Although nonemployer establishments accounted for 62 percent of all establishments, they accounted for only 8 percent of all business receipts. On the other hand, the remaining 4,946 employer establishments numerically made up

(continued on page 6)

Table 3
CONSTRUCTION INDUSTRIES IN NEBRASKA, 1977

	All Establishments	Establishments without Payroll	Establishments with Payroll
Number of Establishments	13,132	8,186	4,946
Proprietors and Working Partners	11,654	8,371	3,283
All Employees	35,975	----	35,975
All Business Receipts ($000)	2,109,436	177,177	1,932,259

Source: U.S. Bureau of the Census, *Census of Construction Industries,* 1967, 1972, and 1977.

Table 4
CONSTRUCTION INDUSTRIES IN NEBRASKA, 1967, 1972, AND 1977

				Average Annual Percent Change		
	1967	1972	1977	1967-72	1972-77	1967-77
Number of Establishments	8,202	8,924	13,132	1.7	8.0	4.8
Proprietors and Working Partners	7,641	7,793	11,654	0.4	8.4	4.3
All Employees	25,527	29,438	35,975	2.9	4.1	3.5
All Business Receipts ($000)	799,407	1,101,110	2,109,436	6.6	13.9	10.2
Constant Dollar Business Receipts* (1967=100)	799,407	796,175	975,687	-0.1	4.2	2.0

*Receipts are deflated by the Construction Cost Index prepared by the U.S. Department of Commerce.

Source: U.S. Bureau of the Census, *Census of Construction Industries,* 1967, 1972, and 1977. Calculations by Bureau of Business Research.

Table 5
EMPLOYMENT IN CONSTRUCTION INDUSTRIES IN NEBRASKA, 1967, 1972, AND 1977

					Average Annual Percent Change		
	1967	1972	1977	Percent of Total 1977	1967-72	1972-77	1967-77
Total	25,527	29,438	35,975		2.9	4.1	3.5
General Building Contractors & Operative Builders	7,682	9,133	10,450	29.0	3.5	2.7	3.1
Residential Builders	2,637	3,676	5,465	15.2	6.9	8.3	7.6
Nonresidential Builders	5,045	5,457	4,985	13.9	1.6	-1.8	-0.1
Heavy Construction General Contractors	6,241	5,250	6,845	19.0	-3.4	5.4	0.9
Highway and street construction	2,442	2,133	3,121	8.7	-2.7	7.9	2.5
Heavy construction other than highway and street	3,799	3,117	3,724	10.4	-3.9	3.6	-0.2
Special Trade Contractors	11,497	14,957	18,602	51.7	5.4	4.5	4.9
Plumbing, heating, & air conditioning	2,980	3,318	3,910	10.9	2.2	3.3	2.8
Painting, paper hanging, & decorating	807	890	836	2.3	2.0	-1.2	0.4
Electrical work	1,832	2,557	4,208	11.7	6.9	10.5	8.7
Masonry, plastering, & tile setting	1,870	2,898	3,235	9.0	9.2	2.2	5.6
Carpentering & flooring	4,008	1,295	1,280	3.6	5.7	-0.2	4.8
Other special trade contractors		3,999	5,133	14.3		5.1	
Subdividers & Developers	107	98	78	0.2	-1.7	-4.5	-3.1

Source: U.S. Bureau of the Census, *Census of Construction Industries,* 1967, 1972, and 1977. Calculations by Bureau of Business Research.

Review and Outlook

The Nebraska economy recorded a 1.2% increase in physical volume output in December 1980. The increase in the state's economy was lead by a substantial increase in agriculture output, which more than offset the slight decrease in nonagriculture sectors of the Nebraska economy.

The index of agriculture output was up 16.1% above the November 1980 level. This represents one of the sharpest increases in some time in the agriculture component of the index, and likely reflects year-end marketings. Cash farm marketings in Nebraska in December totaled $92.2 million, up 37% above year-previous levels.

Prices received by Nebraska farmers declined 1.5% in December compared with November, while prices increased 0.4% at the national level. During 1980, prices received by Nebraska farmers advanced 8.6%, while prices paid increased 12.3%.

Output in the nonagriculture segment of the Nebraska economy declined 0.3% November to December. Construction was up 7.9% above month-previous levels. The index of construction activity now stands at 89.2, compared with 99.0 in December 1979. The construction sector of the Nebraska economy is operating at about 90% of the level one year ago, December 1979. This compares with national figures which show the construction index operating at 89.5% of the December 1979 level.

Output in Nebraska's manufacturing sector increased 0.7% November to December 1980.

(continued on page 5)

Notes for Tables 1 and 2: (1) The "distributive" indicator represents a composite of wholesale and retail trade; transportation, communication and utilities; finance, insurance, and real estate; and selected services. (2) The "physical volume" indicator and its components represent the dollar volume indicator and its components adjusted for price changes using appropriate price indexes—see Table 5, page 5.

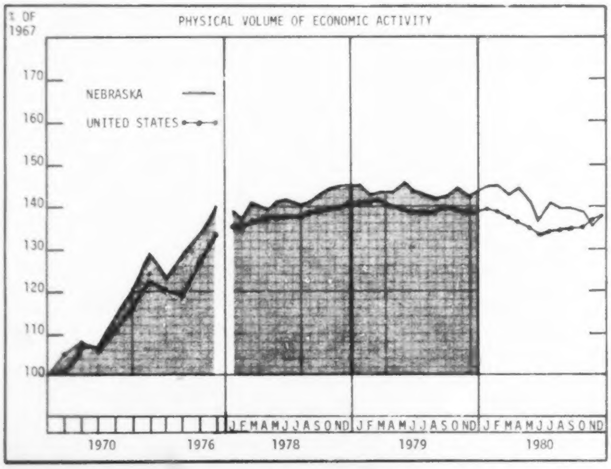
ECONOMIC INDICATORS: NEBRASKA AND UNITED STATES

1. CHANGE FROM PREVIOUS YEAR

December 1980	Current Month as Percent of Same Month Previous Year		1980 Year to Date as Percent of 1979 Year to Date	
Indicator	Nebraska	U.S.	Nebraska	U.S.
Dollar Volume	103.5	108.9	107.4	108.8
Agricultural	104.6	118.9	115.6	107.2
Nonagricultural	103.4	108.6	106.3	108.9
Construction	99.7	99.0	78.6	100.8
Manufacturing	105.7	109.2	110.6	109.2
Distributive	102.6	109.2	107.4	109.7
Government	104.5	108.5	105.8	107.5
Physical Volume	93.4	97.7	96.8	97.0
Agricultural	96.3	107.1	113.0	105.4
Nonagricultural	93.1	97.5	94.9	96.8
Construction	90.0	89.5	70.6	90.9
Manufacturing	94.6	97.5	97.9	95.6
Distributive	91.3	97.2	94.7	96.6
Government	99.2	100.9	99.0	101.6

2. CHANGE FROM 1967

Indicator	Percent of 1967 Average	
	Nebraska	U.S.
Dollar Volume	346.8	337.5
Agricultural	296.5	358.6
Nonagricultural	354.3	336.8
Construction	277.4	321.7
Manufacturing	366.9	301.7
Distributive	361.1	360.8
Government	355.2	324.5
Physical Volume	136.9	136.9
Agricultural	107.0	131.4
Nonagricultural	141.4	137.1
Construction	89.2	103.4
Manufacturing	162.4	132.4
Distributive	139.7	139.6
Government	146.6	150.2

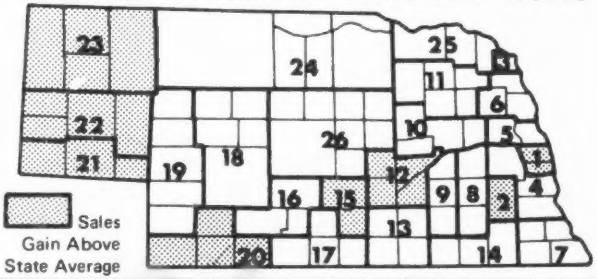


3. NET TAXABLE RETAIL SALES OF NEBRASKA REGIONS AND CITIES (Adjusted for Price Changes)

Region Number and City	City Sales*	Sales in Region*	
	Dec. 1980 as percent of Dec. 1979	Dec. 1980 as percent of Dec. 1979	Year to date '80 as percent of Year to date '79
The State	91.2	91.5	91.0
1 Omaha	92.9	93.4	92.7
-Bellevue	87.4		
2 Lincoln	97.1	97.8	93.4
3 So. Sioux City	85.2	89.5	88.0
4 Nebraska City	90.0	87.4	84.3
5 Fremont	88.3	88.6	86.6
Blair	89.9		
6 West Point	84.0	84.0	81.2
7 Falls City	77.9	81.7	84.5
8 Seward	90.5	84.9	85.7
9 York	93.4	93.8	88.1
10 Columbus	108.3	96.2	87.0
11 Norfolk	87.0	86.4	84.1
Wayne	89.1		
12 Grand Island	95.3	94.0	92.0
13 Hastings	92.6	90.8	88.6
14 Beatrice	89.6	87.3	87.0
Fairbury	87.6		
15 Kearney	93.8	93.5	91.0
16 Lexington	91.6	90.1	88.4
17 Holdrege	87.1	93.3	89.7
18 North Platte	88.2	87.0	83.8
19 Ogallala	85.9	87.8	88.5
20 McCook	87.6	93.7	92.0
21 Sidney	80.6	89.5	93.6
Kimball	93.7		
22 Scottsbluff/Gering	94.8	102.4	93.4
23 Alliance	75.0	81.7	90.2
- Chadron	76.7		
24 O'Neill	82.8	79.4	84.4
25 Hartington	90.0	86.2	82.7
26 Broken Bow	87.8	81.0	86.2

*State totals include sales not allocated to cities or regions. The year to year ratios for city and region sales may be misleading because of changes in the portion of unallocated sales. Region totals include, and city totals exclude, motor vehicle sales. Sales are those on which sales taxes are collected by retailers located in the state. Compiled from data provided by Nebraska Department of Revenue.

1980 YEAR TO DATE AS PERCENT OF 1979 YEAR TO DATE IN NEBRASKA'S PLANNING AND DEVELOPMENT REGIONS



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(continued from page 4)

The index now stands at 162.4, which is up from the June low of 159.9 but still remains below the February 1980 peak of 176.1. Nebraska's manufacturing sector produced approximately 95% of year-previous (December 1979) levels. Nationally, December 1979 was approximately 97.5% of year-earlier levels.

Nebraska's distributive trade sector declined 1.2% in December 1980 compared with November 1980. This sector has displayed minimal increase since rebounding from second-quarter lows. The index for the distributive trade sector stood at 139.7 in December 1980. This compared with an index value of 153.0 December 1979, and indicates that the distributive sector is operating at approximately 91% of the level recorded in December 1979.

Output in the government sector showed no change in December 1980. This sector has had little movement during the past two years and is approximately 1% below year-previous levels. While output in Nebraska's public sector has declined during the past two years, there has been a slight increase nationally.

Nebraska's retail sales continued to show small dollar volume increases. December sales were up an estimated 1.2% on a dollar volume basis. Commodity price increases were up 11.1% over the past year, so when deflated for price changes, real retail sales were down.

Cities showing strength in retail sales include Columbus, Lincoln, and Grand Island. Real retail sales were up more than 8% above December 1979 in Columbus, one of the few communities in the state to record a real increase. Lincoln recorded a dollar volume increase of 7.9% compared with year-earlier levels, while Grand Island recorded a 5.9% increase.

An examination of the consumer price index over the past twelve months indicates that inflation peaked in the second quarter of 1980. Price increases at that time were running 14.4% above year-previous levels and since have declined gradually. The December 1980 reading indicates that the consumer price index was 13.5% above year-earlier levels, down from the peak of 14.4%. It would be premature to suggest whether this indicates a slowing of inflationary trends or simply a pause before price increases accelerate.

D. E. P.

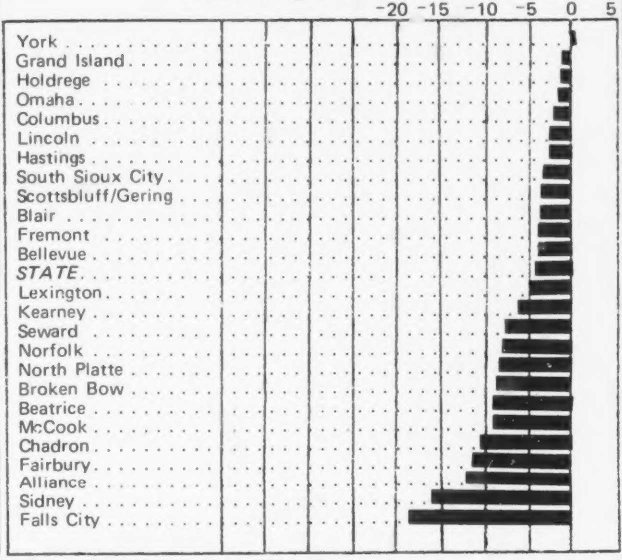
5. PRICE INDEXES

December, 1980	Index (1967 = 100)	Percent of Same Month Last Year	Year to Date as Percent of Same Period Last Year*
Consumer Prices	258.4	112.4	113.5
Commodity component	243.8	111.1	112.2
Wholesale Prices	280.3	112.3	114.0
Agricultural Prices			
United States	273.0	111.0	102.1
Nebraska	277.0	108.6	102.8

*Using arithmetic average of monthly indexes.
Sources: Consumer and Wholesale Prices: U.S. Bureau of Labor Statistics; Agricultural Prices: U.S. Department of Agriculture.

CITY BUSINESS INDEXES

Percent Change December 1979 to December 1980



Source: Table 3 (page 4) and Table 4 below.

4. DECEMBER CITY BUSINESS INDICATORS

The State and Its Trading Centers	Percent of Same Month a Year Ago: Employment[1]	Building Activity[2]	Power Consumption[3]
The State	98.5	94.9	101.2
Alliance	100.9	59.0	88.9
Beatrice	99.1	46.1	93.0
Bellevue	99.1	136.5	148.0
Blair	98.3	123.6	77.7
Broken Bow	99.0	58.8	90.8
Chadron	97.4	129.1	102.5
Columbus	97.4	36.0	107.5
Fairbury	99.1	33.3	94.9
Falls City	99.1	17.2	108.2
Fremont	105.9	67.7	106.8*
Grand Island	98.1	130.7	94.6
Hastings	99.8	109.5	96.0
Holdrege	98.6	256.0	153.2
Kearney	94.3	74.9	99.4
Lexington	98.5	89.2	103.4
Lincoln	95.9	105.3	91.5
McCook	98.5	57.6	98.2
Nebraska City	99.4	NA	90.0
Norfolk	98.2	73.9	108.6
North Platte	99.0	58.3	92.9
Omaha	99.1	136.7	105.9
Scottsbluff/Gering	97.7	88.3	101.0
Seward	97.3	59.5	116.1
Sidney	99.7	20.9	97.8
So. Sioux City	100.6	179.8	106.6
York	99.2	223.1	102.1

[1] As a proxy for city employment, total employment for the county in which a city is located is used.

[2] Building Activity is the value of building permits issued as spread over an appropriate time period of construction. The U.S. Department of Commerce Composite Construction Cost Index is used to adjust construction activity for price changes.

[3] Power Consumption is a combined index of consumption of electricity and natural gas except in cases marked * for which only one is used.

Source: Compilation by Bureau of Business Research from reports of private and public agencies.

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(continued from page 3)

38 percent of the industry but accounted for 92 percent of the receipts of the construction industry.

As might be expected, proprietors and working partners are disproportionately represented in the nonemployer category. In fact, 72 percent of the proprietors and working partners fall into this category.

Table 4 (p. 3) shows some of the changes which occurred in Nebraska's construction industry between 1967 and 1977. The data in Table 4 are for all establishments, that is, both those with and those without payroll employees. In looking at the table, two things become readily apparent: first, most of the growth in construction occurred during the 1972-1977 period; and second, business receipts have increased more rapidly than any other measure. Business receipts, however, reflect both increased costs of construction as well as increased activity. In fact, if increased costs are taken into account, the changes in business receipts would be less than the changes in other measures.

Between 1967 and 1977, the number of establishments increased at an average annual rate of 4.8 percent. This rate was larger than the growth rate for proprietors and working partners (4.3 percent) and the rate for employees (3.5 percent). This seems to indicate that during this time period the average number of persons working in each firm declined. Table 4 also indicates that the increase in payroll employees was more stable than either the expansion in the number of establishments or the number of proprietors and working partners.

Because information for construction firms with payroll was obtained directly from them, the census presents much more detailed information for employers than it does for nonemployers. Besides, most of the construction activity (as measured by receipts) is centered in these establishments. Tables 5 (p. 3) and 6, therefore, present a more detailed look at employers. As mentioned earlier, there are several measures which can be used to describe the construction industry. Tables 5 and 6 concentrate on employment because it is not directly influenced by changing prices and does not have the problems of disclosure that are associated with receipts.

In 1977, slightly more than half (51.7 percent) of the 35,975 construction employees were employed by special trade contractors (see Table 5). An additional 29.0 percent were employed by general building contractors and operative builders, 19.0 percent were employed by heavy construction general contractors, and the remainder were employed by subdividers and developers.

Table 5 also shows the changes in employment for employer establishments. Between 1967 and 1977, employment grew at an average annual rate of 3.5%. The major industry groups did not share equally in this growth, however. Not only was special trade contractors the largest group, it was also the fastest growing, with an average yearly increase of 4.9 percent. This group outpaced the 3.1 percent growth in general building contractors and operative builders and the 0.9 percent growth of heavy construction and general contractors. Subdividers and developers declined by an average of 3.1 percent per year.

Based on the information in Table 6, it appears that the typical construction establishment in Nebraska provides employment opportunities for a proprietor or working partners, and/or 1 to 4 employees. This does not mean, however, that all construction activity is carried on by relatively small firms. Table 6 shows that in 1977, 35 firms employed 100 or more persons, with 2 of those employing 500 to 999. Although these 35 firms amount to less than 1 percent of the employers, they account for approximately one-fourth of all employees.

J. A. D.

Table 6
ESTABLISHMENTS WITH PAYROLL
BY EMPLOYMENT SIZE CLASS: 1967 AND 1977

Number of Employees	Number of Firms 1967	Number of Firms 1977
Total	3,501	4,946
1 to 4	2,485	3,205
5 to 9	520	1,009
10 to 19	264	433
20 to 49	167	216
50 to 99	42	47
100 to 249	17	19
250 to 499	5	14
500 to 999	0	2
1,000 or more	1	0

Source: U.S. Bureau of the Census, *Census of Construction Industries*, 1967, 1972, and 1977.

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FARMLAND PRICE TRENDS AND IMPLICATIONS

With the possible exception of energy developments, few other economic trends have been as dramatic in recent years as those associated with the market for farm real estate. The 1970s decade saw farmland values climbing at record rates. For the forty-eight contiguous states, the average increase over the ten-year period approached 250 percent. Here in Nebraska, irrigated land appreciated 259 percent, dry cropland appreciated 275 percent, and grazing land climbed 216 percent in value. In other words, ranchland in the Sandhills selling for $50 per acre in 1970 sold for more than $150 per acre in 1980; eastern Nebraska dryland cropland valued at $400 per acre in 1970 was pegged at $1,500 per acre ten years later; and southcentral Nebraska irrigated land which could have been purchased for $700 per acre in 1970 was valued in excess of $2,500 per acre by 1980.

Indeed, the financial conditions of landowners have been affected greatly by land value appreciation. In fact, even considering the rate of inflation in our total economy, farm real estate owners still experienced a "real" increase in the purchasing power of their asset value, since farmland appreciated about twice as fast as the general price level.

Some interesting questions arise as we consider the current decade. Given the recent past, are we entering into a "new ballgame" in terms of farm real estate investment? Will forces keep the demand for farmland high and, hence, values trending steadily upward? Will investment decisions of the 1980s reflect influences differing from those of the 1970s? Who will be the market participants? In an agricultural state such as Nebraska, these are weighty questions, affecting many Nebraskans directly and virtually all of us indirectly. Obviously, one cannot adequately respond to any of these questions here. The issues are far too complex and the U.S. economic future too uncertain. Nevertheless, some perspective can be gained from a closer look at past and current trends.

LAND VALUES AND EARNINGS IN RETROSPECT

In the case of a productive asset (such as farmland), a direct relationship is expected between the earnings from that asset and its value. In short, a prospective buyer in the land market is purchasing a future stream of earnings (income).

Land boom conditions of recent years have brought about a reassessment of this relationship. Aggregate farm income levels do not appear to justify the dramatic land value increases. For example, Nebraska farmland now selling for $1,500 per acre would typically be returning about $60 annually to the owner (4 percent of market value). If this land were being purchased with a 20 percent down payment and a conventional mortgage bearing a 12 percent interest rate, the annual amortized mortgage payment would approach $150 per acre. Therefore, the financial obligation would exceed the current earnings level by nearly 2½ times.

However, while current earnings seldom justify today's market prices, it is the anticipation of the *future* income stream which enters into the price determination. Apparently, in recent years, market participants have expected growth in the annual income stream and the accompanying appreciation.

Recent studies of historical trends suggest that there is some precedent to expect a continuing relationship between land earnings and value.[1] Annual earnings attributed to farmland have generally trended upward at approximately the same rate as farmland values have appreciated. Obviously, given the inherent income variability associated with the agricultural sector, the ratio of annual earnings to market value may vary greatly from year to year. But even during the recent periods of rapid asset appreciation, returns to land were also trending sharply upward. Take, for example, central Nebraska irrigated land. While values were climbing from levels of $600 to $700 per acre to more than $2,000 per acre in the 1970s, annual returns were climbing accordingly, that is, average annual cash rental rates climbed from the $40-45 per acre range to more than $100 per acre. Given such growth rates, the pre-tax internal rate of return to farmland investment during the 1970s often exceeded 20 percent per year. In other words, owners received an annual return of more than twenty cents per dollar of equity investment. For most investors, few if any alternatives would have yielded a higher opportunity cost. The obvious implication is that the land boom conditions of recent years had to occur in light of growth in earnings. Moreover, contrary to the opinion of some, today's investors generally *are* considering the annual earnings component and are projecting future income potential on the basis of a continued growth in earnings.

Quite appropriately, some see today's farmland investment as being similar to what stock market analysts describe as a "growth stock." It is characterized by a relatively high price-earnings ratio, particularly during the early years of the investment period. Such a condition implies potential "cash flow" problems for farmland buyers who do not have supplemental income sources. Earnings from the land investment in the short run simply will not cover debt repayment obligations, even though the investment may be profitable in the long run. As interest rates on long-term financing have reached new plateaus,

(continued on page 2)

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[1] Emanuel Melichar, "Capital Gains Versus Current Income in the Farming Sector," *American Journal of Agricultural Economics* 61, No. 5 (December, 1979).

(continued from page 1)

this cash flow aspect has become increasingly pronounced.

LAND VALUES IN AN INFLATIONARY ENVIRONMENT

Land price trends and general inflation are not unrelated. As one economist has noted, "The higher the general rate of inflation in the economy, the higher the annual increase in the return to land is apt to be."[2] One reason for this is the effect of current farm programs. These programs are set to insure that crop commodity price levels move with general inflationary trends. In effect, the framework operates much like the inflation-escalator clause of a negotiated wage package. The consequence is that higher returns to crop producers will ultimately be capitalized into the value of farmland. Hence, farmland values will move upward with the general rate of inflation.

There is also a second factor. This is the tendency during inflationary periods for wealth to gravitate toward more tangible holdings as a hedge against inflation. If the value of the dollar and more liquid assets is expected to continue declining in an inflationary environment, then investors will be willing to pay relatively more for farmland, an appreciating asset. They perceive it as not only protecting but also enhancing their position of net worth. Thus, the demand side of the market becomes more active, and values will be bid upward at a rate equal to or greater than the rate of inflation. Paradoxically, today's farmland investor is quite likely hoping for continuing inflation, even though his rhetoric may indicate he considers it bad. Ruttan has noted, "The only thing that could be considered worse than continued inflation is deflation."[3]

In brief, both institutional and market forces suggest a close correlation of farmland values with general inflationary trends. So long as the economy is inflation-prone, farmland appreciation will likely continue.

(continued on page 6)

Table 1
AVERAGE REPORTED VALUE OF NEBRASKA FARMLAND FOR DIFFERENT TYPES OF LAND
BY CROP REPORTING DISTRICT, FEB. 1, 1980 AND FEB. 1, 1981

Type of Land and Year Reported	Crop Reporting District							
	Northwest	North	Northeast	Central	East	Southwest	South	Southeast
				(dollars per acre)				
Dryland Cropland (no irrigation potential)								
1981	419	346	1,009	519	1,409	546	754	1,060
1980	347	340	920	471	1,296	454	626	971
Percent change:	20.8	1.8	9.7	10.2	8.7	20.3	20.5	9.2
Dryland Cropland (irrigation potential)								
1981	680	533	1,225	880	1,785	733	1,432	1,402
1980	533	563	1,132	767	1,733	628	1,282	1,352
Percent change:	27.6	-5.3	8.2	14.7	3.0	16.7	11.7	3.7
Grazing Land (tillable)								
1981	251	257	622	435	881	332	697	636
1980	200	261	583	395	760	307	621	643
Percent change:	25.5	-1.5	6.7	10.1	15.9	8.1	12.2	-1.1
Grazing Land (nontillable)								
1981	164	182	418	339	620	217	398	474
1980	143	169	394	304	549	190	346	473
Percent change:	14.7	7.7	6.1	11.5	12.9	14.2	15.0	0.2
Hayland								
1981	323	331	558	482	738	368	417	532
1980	301	338	506	441	699	349	402	554
Percent change:	7.3	-2.1	10.3	9.3	5.6	5.4	3.7	-4.0
Gravity Irrigated								
1981	1,555	1,054	1,781	2,088	2,403	1,493	2,230	2,026
1980	1,369	1,020	1,547	1,976	2,317	1,329	2,046	1,968
Percent change:	13.6	3.3	15.1	5.7	3.7	12.3	9.0	3.0
Center Pivot Irrigated[1]								
1981	973	816	1,456	1,312	2,110	1,105	1,732	1,900
1980	894	886	1,372	1,223	2,043	971	1,535	1,795
Percent change	8.8	-7.9	6.1	7.3	3.3	13.8	12.8	5.9

[1] Pivot not included in per acre value.

Source: 1980 and 1981 *Nebraska Farm Real Estate Market Survey*.

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[2] Paul R. Hasbargen, "Land Prices: Why So High? Will They Go Higher?" *Minnesota Agricultural Economist*, No. 622 (August-September, 1980).

[3] Vernon W. Ruttan, "Inflation and Productivity," *American Journal of Agricultural Economics* 61, No. 5 (December, 1979).

Table 2
AVERAGE REPORTED VALUE PER ACRE OF NEBRASKA FARMLAND
FOR DIFFERENT TYPES OF LAND AND GRADE, BY CROP REPORTING DISTRICT, FEB. 1, 1981

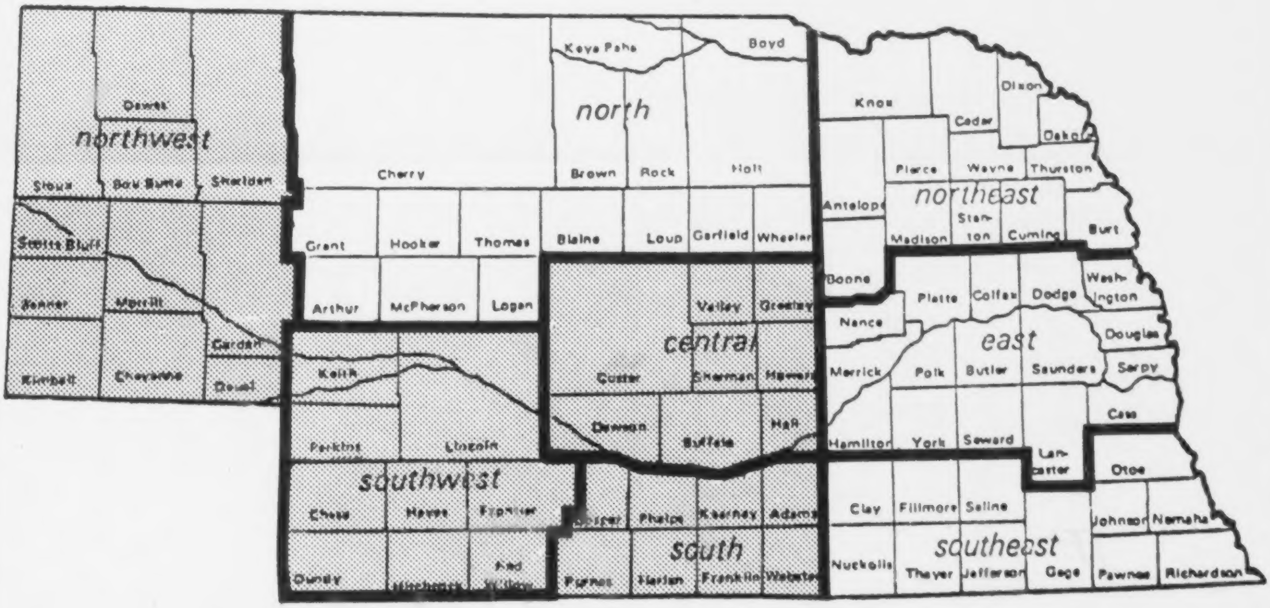
Type of Land and Quality	Crop Reporting District							
	Northwest	North	Northeast	Central	East	Southwest	South	Southeast
	(dollars per acre, rounded to nearest $5)							
Dryland Cropland (no irrigation potential)								
High grade	520	380	1,380	685	1,550	625	890	1,290
Lowgrade	340	270	820	415	1,025	405	580	820
Dryland Cropland (irrigation potential)								
High grade	745	610	1,480	1,260	1,995	800	1,565	1,575
Low grade	510	420	980	700	1,325	565	925	1,105
Grazing Land (tillable)								
High grade	285	325	750	530	1,035	400	865	700
Low grade	190	225	550	375	730	260	470	515
Grazing Land (nontillable)								
High grade	195	230	535	375	760	245	480	525
Low grade	135	135	340	265	500	180	330	350
Hayland								
High grade	370	395	795	560	905	490	535	620
Low grade	260	270	420	355	640	305	365	475
Gravity Irrigated								
High grade	1,930	1,385	2,090	2,450	2,705	1,665	2,465	2,275
Low grade	1,100	935	1,445	1,480	1,820	1,165	1,655	1,630
Center Pivot Irrigated[1]								
High grade	1,000	910	1,745	1,555	2,295	1,215	1,815	2,075
Low grade	710	610	1,130	930	1,595	850	1,270	1,545

---

[1] Pivct not included in per acre value.

Source: 1981 *Nebraska Farm Real Estate Market Survey.*

Figure 1
NEBRASKA CROP REPORTING DISTRICTS
(Shaded districts recorded three or more land classifications
with a 10 percent or greater increase in value, 1980-81)


northwest
north
northeast
central
east
southwest
south
southeast
Dawes
Sioux
Box Butte
Sheridan
Scotts Bluff
Banner
Morrill
Garden
Kimball
Cheyenne
Deuel
Cherry
Keya Paha
Boyd
Brown
Rock
Holt
Grant
Hooker
Thomas
Blaine
Loup
Garfield
Wheeler
Arthur
McPherson
Logan
Valley
Greeley
Custer
Sherman
Howard
Dawson
Buffalo
Hall
Keith
Perkins
Lincoln
Chase
Hayes
Frontier
Dundy
Hitchcock
Red Willow
Gosper
Phelps
Kearney
Adams
Furnas
Harlan
Franklin
Webster
Knox
Cedar
Dixon
Dakota
Antelope
Pierce
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Thurston
Madison
Stanton
Cuming
Burt
Boone
Platte
Colfax
Dodge
Washington
Nance
Douglas
Merrick
Polk
Butler
Saunders
Sarpy
Cass
Hamilton
York
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Review and Outlook

The level of economic activity in Nebraska rose a healthy 2.3% as measured by the index of physical volume output in January 1981 compared with December 1980. This increase in Nebraska output was approximately three times the rate of increase recorded by the physical volume index for the United States, the index rising 0.8% nationally.

The December-to-January increase in the state's economic activity was observed in all sectors except government. Agriculture and construction had sharply higher percentage increases on a month-to-month basis. It should be noted that January changes are based upon revised data which produced significant changes in some of the sectors. These changes are annual revisions in the data series which are used to calculate the indexes, especially the employment and cash-farm marketing data series. The indexes in Table 2 reflect the changes, including new seasonal adjustment factors, and are not directly comparable to data published in previous issues of *Business in Nebraska*.

The agriculture sector recorded a December-to-January output increase of 10.5%. Agriculture output changes are extremely volatile. Cash receipts totaled nearly $610 million on a seasonally unadjusted basis, which was down about 8.6% from the previous month. Cash farm marketing receipts for the United States on a seasonally unadjusted basis were $13.2 billion, down 0.8% over the same interval. Comparing January 1981 with January 1980, cash farm marketings were off

(continued on page 5)

Notes for Tables 1 and 2: (1) The "distributive" indicator represents a composite of wholesale and retail trade; transportation, communication and utilities; finance, insurance, and real estate; and selected services. (2) The "physical volume" indicator and its components represent the dollar volume indicator and its components adjusted for price changes using appropriate price indexes—see Table 5, page 5.

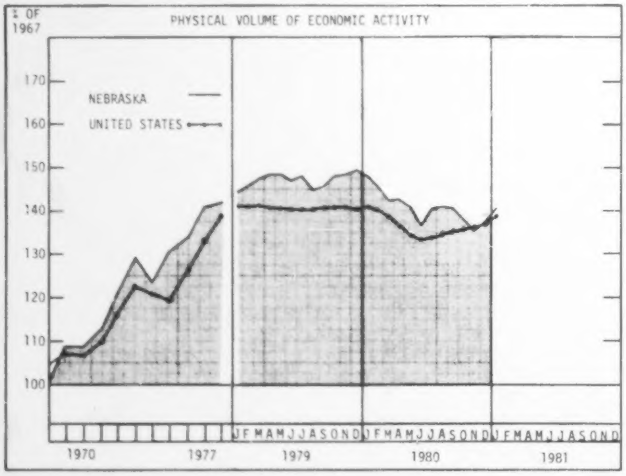
ECONOMIC INDICATORS: NEBRASKA AND UNITED STATES

1. CHANGE FROM PREVIOUS YEAR

January 1981	Current Month as Percent of Same Month Previous Year		1981 Year to Date as Percent of 1980 Year to Date	
Indicator	Nebraska	U.S.	Nebraska	U.S.
Dollar Volume	104.9	108.6	104.9	108.6
Agricultural	100.2	111.5	100.2	111.5
Nonagricultural	105.6	108.5	105.6	108.5
Construction	111.9	98.5	111.9	98.5
Manufacturing	105.6	108.9	105.6	108.9
Distributive	105.3	109.3	105.3	109.3
Government	104.8	108.1	104.8	108.1
Physical Volume	95.1	98.0	95.1	98.0
Agricultural	92.0	100.2	92.0	100.2
Nonagricultural	95.5	97.9	95.5	97.9
Construction	102.2	89.9	102.2	89.9
Manufacturing	95.2	97.9	95.2	97.9
Distributive	94.3	97.8	94.3	97.8
Government	99.8	100.6	99.8	100.6

2. CHANGE FROM 1967

Indicator	Percent of 1967 Average	
	Nebraska	U.S.
Dollar Volume	357.7	343.9
Agricultural	328.2	359.1
Nonagricultural	362.0	343.4
Construction	292.3	340.3
Manufacturing	374.6	309.2
Distributive	370.3	367.1
Government	353.3	325.8
Physical Volume	140.5	138.2
Agricultural	121.6	135.0
Nonagricultural	143.3	138.3
Construction	93.7	109.1
Manufacturing	164.1	133.4
Distributive	142.1	140.9
Government	145.9	150.1

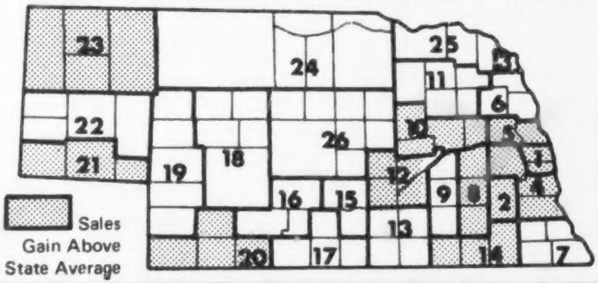


3. NET TAXABLE RETAIL SALES OF NEBRASKA REGIONS AND CITIES (Adjusted for Price Changes)

Region Number and City	City Sales*	Sales in Region*	
	Jan. 1981 as percent of Jan. 1980	Jan. 1981 as percent of Jan. 1980	Year to date'81 as percent of Year to date'80
The State	103.6	101.4	101.4
1 Omaha	104.8	105.6	105.6
Bellevue	111.5		
2 Lincoln	106.1	104.5	104.5
3 So. Sioux City	90.0	90.5	90.5
4 Nebraska City	108.5	101.0	101.0
5 Fremont	102.9	100.7	100.7
Blair	105.2		
6 West Point	94.5	91.8	91.8
7 Falls City	111.3	96.5	96.5
8 Seward	106.1	108.4	108.4
9 York	100.6	90.6	90.6
10 Columbus	130.9	107.0	107.0
11 Norfolk	98.2	90.2	90.2
Wayne	90.1		
12 Grand Island	104.6	100.9	100.9
13 Hastings	96.8	95.6	95.6
14 Beatrice	114.6	105.2	105.2
Fairbury	93.0		
15 Kearney	101.7	98.1	98.1
16 Lexington	100.0	90.6	90.6
17 Holdrege	113.5	97.7	97.7
18 North Platte	93.6	89.1	89.1
19 Ogallala	106.6	86.8	86.8
20 McCook	108.8	111.4	111.4
21 Sidney	104.7	103.7	103.7
Kimball	117.4		
22 Scottsbluff/Gering	101.8	98.5	98.5
23 Alliance	115.0	100.8	100.8
Chadron	121.9		
24 O'Neill	95.7	84.6	84.6
25 Hartington	99.1	89.2	89.2
26 Broken Bow	90.3	86.1	86.1

*State totals include sales not allocated to cities or regions. The year-to-year ratios for city and region sales may be misleading because of changes in the portion of unallocated sales. Region totals include, and city totals exclude, motor vehicle sales. Sales are those on which sales taxes are collected by retailers located in the state. Compiled from data provided by Nebraska Department of Revenue.

1981 YEAR TO DATE AS PERCENT OF 1980 YEAR TO DATE IN NEBRASKA'S PLANNING AND DEVELOPMENT REGIONS



(continued from page 4) approximately 1%, or $6.2 million. Nationally, cash farm marketing receipts were up 11.5% when January 1981 is compared with year-previous levels.

Output in Nebraska's nonagriculture sector was up 1.3% on a month-to-month basis. Construction recorded one of the sharpest percentage increases, rising 7.0%. This sector, of course, has been depressed for some time. A moderate recovery started in 1980 and appears to have gained some momentum in January 1981.

Output in Nebraska's manufacturing sector was up 0.6% December-January 1981. While data revisions make comparisons difficult, output in the manufacturing sector is gradually increasing.

Nebraska's distributive trade sector recorded a 1.7% increase December-January 1981. This represents one of the largest monthly gains for the distributive sector for the past twelve months. The government sector was the only area of the Nebraska economy to decline in January, the index dropping 0.8%.

While output in Nebraska was up, employment declined on a month-to-month basis. Compared with year-previous levels, employment in January 1981 was down 3,600. Nebraska's unemployment rate in January 1981 was estimated at 5.1%, up from 4.8% in December 1980 and 4.4% in January 1980. Employment increases usually lag changes in output levels, and January 1981 seems to be no exception.

Nebraska retail sales recorded substantial gains in January 1981. Dollar volume retail sales were up approximately 11.7% in January 1981 compared with January 1980. The commodity component of the Consumer Price Index was up approximately 10.3% on a January-to-January basis, leading to a price-adjusted retail sales gain of 1.4%. Cities recording sharply higher real increases in retail sales in January 1981 compared with January 1980 include Columbus, 30.9%; Chadron, 21.9%; Kimball, 17.4%; Beatrice, 14.6%; Holdrege, 13.5%; Bellevue, 11.5%; Falls City, 11.3%; and Alliance, 11.0%. These are substantial gains in real retail sales and represent one of the best monthly changes in many months.

The city business indexes reflect these gains. Cities recording substantial gains include Holdrege, Columbus, Chadron, Bellevue, Alliance, and Omaha—all up 5% or more (see chart on page 5).

D. E. P.

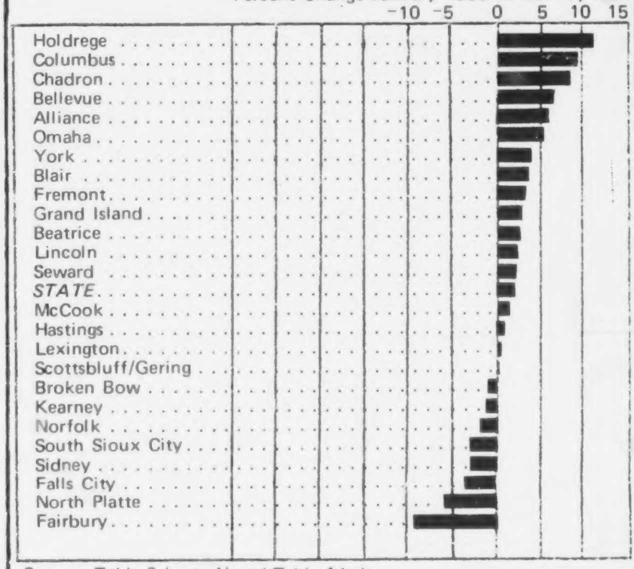
5. PRICE INDEXES

January 1981	Index (1967 = 100)	Percent of Same Month Last Year	Year to Date as Percent of Same Period Last Year*
Consumer Prices	260.5	111.7	111.7
Commodity component	283.5	110.3	110.3
Wholesale Prices	245.4	111.2	111.2
Agricultural Prices			
United States	266.0	111.3	111.3
Nebraska	270.0	108.9	108.9

*Using arithmetic average of monthly indexes.

Sources: Consumer and Wholesale Prices: U.S. Bureau of Labor Statistics; Agricultural Prices: U.S. Department of Agriculture.

CITY BUSINESS INDEXES
Percent Change January 1980 to January 1981



Source: Table 3 (page 4) and Table 4 below.

4. JANUARY CITY BUSINESS INDICATORS

The State and Its Trading Centers	Percent of Same Month a Year Ago Employment[1]	Building Activity[2]	Power Consumption[3]
The State	100.6	106.1	98.5
Alliance	103.6	58.6	93.0
Beatrice	99.3	52.9	100.9
Bellevue	100.3	119.8	86.8
Blair	99.5	144.1	112.6
Broken Bow	99.8	227.6	103.2
Chadron	99.9	90.2	84.3
Columbus	99.7	46.6	98.0
Fairbury	99.6	28.6	89.2
Falls City	100.6	14.2	99.5
Fremont	107.3	76.8	99.3*
Grand Island	99.6	129.4	105.1
Hastings	101.0	136.3	83.1
Holdrege	100.3	278.3	97.2
Kearney	100.4	72.9	105.9
Lexington	100.3	101.3	94.0
Lincoln	100.2	98.2	100.4
McCook	100.5	60.9	96.3
Nebraska City	NA	NA	NA
Norfolk	100.2	80.9	100.5
North Platte	100.9	54.1	103.8
Omaha	100.3	180.0	99.4
Scottsbluff/Gering	100.6	82.1	87.7
Seward	102.8	69.6	107.2
Sidney	100.9	28.7	95.9
So. Sioux City	96.3	170.9	95.7
York	100.7	212.1	96.5

[1] As a proxy for city employment, total employment for the county in which a city is located is used.

[2] Building Activity is the value of building permits issued as spread over an appropriate time period of construction. The U.S. Department of Commerce Composite Construction Cost Index is used to adjust construction activity for price changes.

[3] Power Consumption is a combined index of consumption of electricity and natural gas except in cases marked * for which only one is used.

Source: Compilation by Bureau of Business Research from reports of private and public agencies.

(continued from page 2)

RECENT MARKET TRENDS IN NEBRASKA

While inflation continued at a double-digit rate during 1980, Nebraska farmland values generally showed more modest gains during the year. Income levels for much of Nebraska's farming sector were down considerably in 1980—the culmination of drought, high input costs, and low prices for some outputs. Decline in earnings evidently precipitated some caution in the farmland market.

This was a general conclusion drawn from the 1981 *Nebraska Farm Real Estate Market Survey*, the fourth annual survey conducted by the Department of Agricultural Economics, University of Nebraska-Lincoln. Some five hundred questionnaires were mailed in early January to individuals across the state who are knowledgeable about the farm real estate market in their area.

Survey reporters were asked to estimate farmland values in their respective counties as of February 1, 1981, by major land use. Preliminary results of these estimates are presented in Table 1 (p. 2) and Table 2 (p. 3).

Largest percentage increases were most evident in the western portion of the state. For example, dryland cropland with no irrigation potential was reportedly 20 percent higher than a year earlier in the northwest, southwest, and south districts. In large measure, this may be attributed to a good wheat crop and more favorable price levels during 1980. However, a more "bullish" market apparently existed for other types of land (Figure 1, p. 3).

In rather marked contrast was the eastern part of the state. More modest advances were generally reported. More severe drought conditions prevailed there and quite likely slowed market enthusiasm for a time. Even when crop commodity prices rebounded somewhat in mid-year, caution continued to exist. For northeast, eastern, and southeast Nebraska, most farmland appreciated at rates below the general rate of inflation. In other words, holders of real estate in these areas experienced some loss in the purchasing power of their land assets.

The northern Nebraska area, which is basically the Sandhills region, reportedly experienced slight declines in the value of certain types of farmland during 1980. Again, drought conditions and the resulting declines in range and cropland output seemed to be a major dampening factor.

These recently reported changes and the apparent sensitivity to farm income conditions reinforce the argument that the farm real estate market tends to move somewhat erratically in the short run. Real and even nominal decreases in farmland values can and do occur as short-run optimism wanes. However, as previously discussed, the longer-run expectations predominate in the farmland market. Thus, the 1980 performance may be merely a momentary slow-up and adjustment in expectations to an otherwise upward-climbing land value trend.

IMPLICATIONS FOR FARMLAND INVESTMENT

Many factors suggest that the value for farm real estate will continue climbing in the 1980s, with periodic but short-lived interruptions. Barring any major economic collapse in our U.S. economy, land values in five to seven years could well be double today's levels.

As to a potential investment, farmland will likely remain attractive. The stakes of the game, however, will obviously be higher and often riskier. Increasingly, the farmland investment decision framework is presuming on the future.

This would imply increasing selectivity in who will be purchasing farmland in the years ahead. The high cash-flow requirements will preclude those potential buyers who do not have access to funds apart from the earnings from the land being purchased. For beginning farmers with limited earnings, the barriers to entry via land ownership will become increasingly formidable. Yet, the absence of this buyer group will not likely soften the market, because the very same forces will serve as economic incentives to investors with established wealth. For example, tax provisions strongly encourage the conversion of ordinary income into capital gains; thus, for investors in higher tax brackets, the earnings distribution mix of a farmland investment is ideal. While tenure patterns change slowly, due to the low ownership-turnover rate of farmland, still the direction would suggest some movement toward a "landed" aristocracy.

In the final analysis, the 1980s may hold interesting developments for the farm real estate market. Many trends and influences of the 1970s will likely continue. Perhaps one could say it is the same kind of game, but with higher stakes. And perhaps, changing subtly will be the type of players involved. BRUCE B. JOHNSON*

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Business in Nebraska

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MIGRATION TRENDS AND PATTERNS IN NEBRASKA

With the 1980 census population data, the components of population change can be computed for the various counties and cities in Nebraska for the 1970-80 period. The population change which takes place in a given area over a period of time consists of two components: the natural increase (decrease) in population and the net migration into (out of) the area. The natural increase is simply births minus deaths over a period of time. Adding the natural increase over the 1970-80 period to the 1970 population gives the 1980 population figure if there had been no migration. If net out-migration had exactly equaled the natural increase, no change in the population would have occurred over this period.

Table 1 (pp. 2, 3) can be used to illustrate how net migration figures are arrived at. The population in 1980 (column 2) minus the population in 1970 (column 1) gives the actual change in population (column 3). The natural increase (column 4) is determined by subtracting deaths from births which have occurred over the ten-year period. Net migration (column 5) is arrived at by subtracting the natural increase in population from the actual change in population. If the resulting number is positive, net in-migration has occurred; if negative, net out-migration has occurred. The migration rate (column 6) is simply the net migration as a percent of the 1980 population. It is important to note that the migration figures are *net* figures. They do not indicate anything about the total number of people moving in and out of an area over the period in question.

STATE MIGRATION TRENDS

Net out-migration for the state as a whole improved dramatically during the 1970-80 period over previous census periods. Table 2 shows the population changes and components of population change for the state over the census periods since 1940. Population changes in the state have been fairly constant in the three census periods since 1950. This constancy, however, masks some very definite changes in the components of population change. Since 1950, the natural increase in population (births minus deaths) has markedly decreased. This has been offset, however, by a declining net out-migration over the census periods shown. Net out-migration for the state has consistently decreased throughout the census periods shown, from a high of 135,000 in the 1940-50 period to 12,616 during the 1970-80 period—a relatively low 0.8 percent of the total 1980 state population.

Table 2
COMPONENTS OF POPULATION CHANGE
FOR NEBRASKA

	1940-50	1950-60	1960-70	1970-80
Change in Population	10,000	85,000	74,000	84,673
Natural Increase	145,000	202,000	147,000	97,289
Net Migration	−135,000	−117,000	−73,000	−12,616
Migration Rate*	−10.2	−8.3	−4.9	−0.8

*Net migration as a percent of total population.

COUNTY MIGRATION TRENDS

The information in Table 1 outlines the components of population change for the various counties in Nebraska. Overall, 65 of Nebraska's 93 counties experienced a net out-migration during the 1970-80 census period. Although many of the state's counties are experiencing net out-migration, there is a definite improvement over the 1960-70 census period (column 7). During 1960 to 1970, 86 of the 93 counties experienced a net out-migration. When comparing the net migration rates for the two census periods (columns 6 and 7), the trend is even more favorable. In 80 of Nebraska's 93 counties the migration rate for the 1970-80 census period has improved over that for the 1960-70 census period, that is, either the net out-migration rate has decreased or the net in-migration rate has increased. This would seem to indicate a definite slowdown in the out-migration trend which has characterized Nebraska's rural counties over the past 40 or 50 years.

During the 1970-80 census period, 28 Nebraska counties experienced net in-migration. Of these 28 counties, there were 21 which reversed a situation of net out-migration in the 1960-70 period to one of net in-migration in the 1970-80 period. Some of the major reversals in counties with populations over 5,000 were Box Butte, from −23.3 percent to +21.0 percent; Morrill, from −28.9 percent to +0.9 percent; Dakota, from −6.3 percent to +10.2 percent; Lincoln, from −5.4 percent to +10.8 percent; Cass, from −8.5 percent to +4.4 percent; and Stanton, from −7.4 percent to +5.1 percent. Some of the major reversals in counties with populations under 5,000 were Hooker, from −25.4 percent to +5.8 percent; Perkins, from −28.3 percent to +1.6 percent; Rock, from −22.7 percent to +2.9 percent; Harlan, from −18.5 percent to +1.6 percent; Brown, from −14.1 percent to +5.4 percent; Chase, from −9.0 percent to +9.2 percent; and Franklin, from −17.5 percent to +0.8 percent. What makes this 21-county reversal even more important is that for all but 2 of these counties (Lancaster and Box Butte) it was the

(continued on page 3)

Table 1
COMPONENTS OF POPULATION CHANGE IN THE 1970s

County	Population 1970	Population 1980	Actual Change	Natural Increase	Net Migration	1970s Migration Rate as a % of 1980 Population	1960s Migration Rate as a % of 1970 Population	Improved in 1970-80 over 1960-70
Adams	30,553	30,656	103	964	-861	-2.8	-1.0	-
Antelope	9,047	8,675	-372	282	-654	-7.5	-17.2	+
Arthur	606	513	-93	29	-122	-23.8	-21.1	-
Banner	1,034	918	-116	76	-192	-20.9	-30.6	+
Blaine	847	867	20	46	-26	-3.0	-29.4	+
Boone	8,190	7,391	-799	189	-988	-13.4	-17.9	+
Box Butte	10,094	13,696	3,602	722	2,880	21.0	-23.3	+
Boyd	3,752	3,331	-421	-15	-406	-12.2	-25.6	+
Brown	4,021	4,377	356	118	238	5.4	-14.1	+
Buffalo	31,222	34,797	3,575	2,571	1,004	2.9	8.1	+
Burt	9,247	8,813	-434	-61	-373	-4.2	-12.8	+
Butler	9,461	9,330	-131	74	-205	-2.2	-12.8	+
Cass	18,076	20,297	2,221	1,323	898	4.4	-8.5	+
Cedar	12,192	10,852	-1,340	530	-1,870	-17.2	-21.3	+
Chase	4,129	4,758	629	189	440	9.2	-9.0	+
Cherry	6,846	6,758	-88	452	-540	-8.0	-32.1	+
Cheyenne	10,778	10,057	-721	411	-1,132	-11.3	-50.4	+
Clay	8,266	8,106	-160	282	-442	-5.5	-8.1	+
Colfax	9,498	9,890	392	129	263	2.7	-4.0	+
Cuming	12,034	11,664	-370	472	-842	-7.2	-11.8	+
Custer	14,092	13,877	-215	245	-460	-3.3	-20.8	+
Dakota	13,137	16,573	3,436	1,752	1,684	10.2	-6.3	+
Dawes	9,761	9,609	-152	424	-576	-6.0	-3.6	-
Dawson	19,771	22,162	2,391	1,401	990	4.5	-6.6	+
Deuel	2,717	2,462	-255	-16	-239	-9.7	-18.9	+
Dixon	7,453	7,137	-316	162	-478	-6.7	-12.9	+
Dodge	34,782	35,847	1,065	1,863	-798	-2.2	-3.2	+
Douglas	389,455	397,884	8,429	34,984	-26,555	-6.7	-2.1	-
Dundy	2,926	2,861	-65	-23	-42	-1.5	-23.7	+
Fillmore	8,137	7,920	-217	-157	-60	-0.8	-17.6	+
Franklin	4,566	4,377	-189	-223	34	0.8	-17.5	+
Frontier	3,982	3,647	-335	118	-453	-12.4	-12.1	-
Furnas	6,897	6,486	-411	-262	-149	-2.3	-11.5	+
Gage	25,731	24,456	-1,275	88	-1,363	-5.6	-7.7	+
Garden	2,929	2,802	-127	-37	-90	-3.2	-22.4	+
Garfield	2,411	2,363	-48	-41	-7	-0.3	-16.8	+
Gosper	2,178	2,140	-38	102	-140	-6.5	-17.9	+
Grant	1,019	877	-142	84	-226	-25.8	-11.9	-
Greeley	4,000	3,462	-538	45	-583	-16.8	-20.4	+
Hall	42,851	47,690	4,839	3,285	1,554	3.3	7.5	-
Hamilton	8,867	9,301	434	363	71	0.8	-3.2	+
Harlan	4,357	4,292	-65	-133	68	1.6	-18.5	+
Hayes	1,530	1,356	-174	91	-265	-19.5	-31.2	+
Hitchcock	4,051	4,079	28	110	-82	-2.0	-22.7	+
Holt	12,933	13,552	619	785	-166	-1.2	-15.9	+
Hooker	939	990	51	-6	57	5.8	-25.4	+
Howard	6,807	6,773	-34	249	-283	-4.2	-2.7	-
Jefferson	10,436	9,817	-619	-158	-461	-4.7	-11.5	+
Johnson	5,743	5,285	-458	-46	-412	-7.8	-12.4	+
Kearney	6,707	7,053	346	209	137	1.9	-1.4	+
Keith	8,487	9,364	877	655	222	2.4	-5.9	+
Keya Paha	1,340	1,301	-39	105	-144	-11.1	-33.4	+
Kimball	6,009	4,882	-1,127	364	-1,491	-30.5	-51.4	+
Knox	11,723	11,457	-266	79	-345	-3.0	-19.3	+
Lancaster	167,972	192,884	24,912	13,852	11,060	5.7	-5.6	+
Lincoln	29,538	36,455	6,917	2,995	3,922	10.8	-5.4	+
Logan	991	983	-8	87	-95	-9.7	-16.1	+
Loup	854	859	5	13	-8	-0.9	-34.1	+
Madison	27,402	31,382	3,980	1,606	2,374	7.6	-0.9	+
McPherson	623	593	-30	38	-68	-11.5	-24.1	+
Merrick	8,751	8,945	194	470	-276	-3.1	-2.9	-
Morrill	5,813	6,085	272	218	54	0.9	-28.9	+
Nance	5,142	4,740	-402	75	-477	-10.1	-13.9	+

Table 1 (continued)

County	Population 1970	Population 1980	Actual Change	Natural Increase	Net Migration	1970s Migration Rate as a % of 1980 Population	1960s Migration Rate as a % of 1970 Population	Improved in 1970-80 over 1960-70
Nemaha	8,976	8,367	-609	131	-740	-8.8	-3.2	–
Nuckolls	7,404	6,726	-678	-14	-664	-9.9	-14.0	+
Otoe	15,576	15,183	-393	107	-500	-3.3	-10.4	+
Pawnee	4,473	3,937	-536	-208	-328	-8.3	-16.1	+
Perkins	3,423	3,637	214	155	59	1.6	-28.3	+
Phelps	9,553	9,769	216	242	-26	-0.3	-7.6	+
Pierce	8,493	8,481	-12	304	-316	-3.7	-9.5	+
Platte	26,544	28,852	2,308	2,630	-322	-1.1	-3.4	+
Polk	6,468	6,320	-148	-28	-120	-1.9	-14.5	+
Red Willow	12,191	12,615	424	610	-186	-1.5	-16.2	+
Richardson	12,277	11,315	-962	-429	-533	-4.7	-14.5	+
Rock	2,231	2,383	152	82	70	2.9	-22.7	+
Saline	12,809	13,131	322	-108	430	3.3	1.7	+
Sarpy	66,200	86,015	19,815	12,043	7,772	9.0	36.3	–
Saunders	17,018	18,716	1,698	526	1,172	6.3	7.0	–
Scotts Bluff	36,432	38,344	1,912	3,214	-1,302	-3.4	-4.7	+
Seward	14,460	15,789	1,329	653	676	4.3	1.1	+
Sheridan	7,285	7,544	259	286	-27	-0.4	-31.1	+
Sherman	4,725	4,226	-499	66	-565	-13.4	-20.8	+
Sioux	2,034	1,845	-189	98	-287	-15.6	-32.2	+
Stanton	5,758	6,549	791	454	337	5.1	-7.4	+
Thayer	7,779	7,582	-197	-149	-48	-0.6	-17.0	+
Thomas	954	973	19	49	-30	-3.1	-17.3	+
Thurston	6,942	7,186	244	480	-236	-3.3	-17.3	+
Valley	5,783	5,633	-150	-14	-136	-2.4	-16.2	+
Washington	13,310	15,508	2,198	736	1,462	9.4	3.6	+
Wayne	10,400	9,858	-542	352	-894	-9.1	-3.2	–
Webster	5,396	4,858	-538	-276	-262	-5.4	-13.8	+
Wheeler	1,051	1,060	9	82	-73	-6.9	-36.2	+
York	13,685	14,798	1,113	617	496	3.4	-4.7	+
Total:	1,485,333	1,570,006	84,673	97,289	-12,616	-0.8	-4.8	80 Improved

(continued from page 1)

first net in-migration recorded in more than 40 years.

Of the 65 counties with a net out-migration during the 1970-80 census period, 61 have had net out-migration in each of the census periods since 1940. In most cases, however, these counties had a lower out-migration rate in the 1970-80 period than in the previous census periods. Some of the counties with relatively large net out-migration rates in the 1970-80 period were Kimball, -30.5 percent; Grant, -25.8 percent; Arthur, -23.8 percent; Banner, -20.9 percent; Hayes, -19.5 percent; Cedar, -17.2 percent; Greeley, -16.8 percent; Sioux, -15.6 percent; Boone, -13.4 percent; Sherman, -13.4 percent; Frontier, -12.4 percent; and Boyd, -12.2 percent.

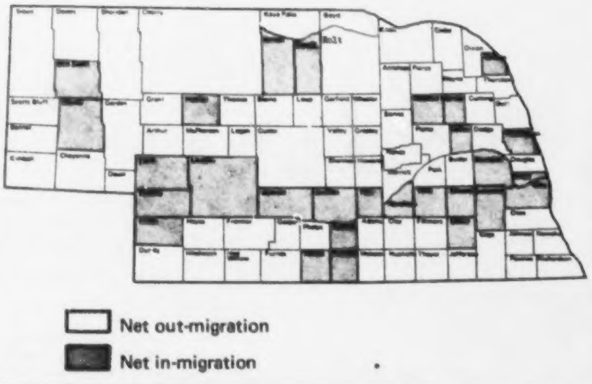
COUNTY MIGRATION IN THE 1970s

With Figure 1, the geographic relationship of net migration by counties can be seen. One of the striking features of Figure 1 is the large number of counties with net in-migration located along the Interstate system. Other areas of net in-migration were Box Butte and Morrill counties in the northwest; Perkins and Chase counties in the southwest; Brown and Rock counties in the north; Kearney, Harlan, and Franklin counties in the south; and Colfax, Dakota, Madison, Stanton, and Washington counties in the northeast part of the state. Counties with net out-migration are still mainly concentrated in the more rural portions of the state.

It is not too surprising that counties along the Interstate would be more likely to experience in-migration. Increased access and retailing activity brought about by the Interstate has undoubtedly increased employment opportunities in these counties. In addition, most of these counties have cities with populations in excess of 5,000. The increased use of capital equipment in agriculture has perhaps meant that cities of this size are increasingly serving as production, outlet, and service centers for surrounding rural areas.

(continued on page 6)

Figure 1
1970-80 MIGRATION BY COUNTIES



Review and Outlook

The Nebraska economy declined in February with the physical volume index recording a decline of 1.3%. The February decline nearly offset the increase in the index recorded in January 1981. Agriculture was up 0.5% in February, while the nonagriculture sector was down 1.5%.

In February, Nebraska cash farm marketing receipts totaled $464 million. This was down from January and down from February 1980 by more than $83 million. Despite this decline from year-previous levels, the index was up when seasonal factors were taken into account.

Cash farm marketing receipts nationally were $9.6 billion in February 1981 (unadjusted for seasonal variations). For the United States, cash farm marketing receipts for February 1981 were 1% below year-previous levels.

Construction recorded a sharp advance January 1981-February 1981, the Nebraska index increasing 8.7%. The construction component of the economy has moved up each month since bottoming in June of 1980. The physical volume of output index is now up 55% above the June 1980 low. Although up from this June 1980 low, the construction index remains approximately 10% below the February 1979 level. Construction remains substantially below peak levels recorded during the 1970s, despite the favorable trend during the past eight months.

Manufacturing was one of the sectors where output declined January-February 1981.

(continued on page 5)

Notes for Tables 1 and 2: (1) The "distributive" indicator represents a composite of wholesale and retail trade; transportation, communication and utilities; finance, insurance, and real estate; and selected services. (2) The "physical volume" indicator and its components represent the dollar volume indicator and its components adjusted for price changes using appropriate price indexes—see Table 5, page 5.

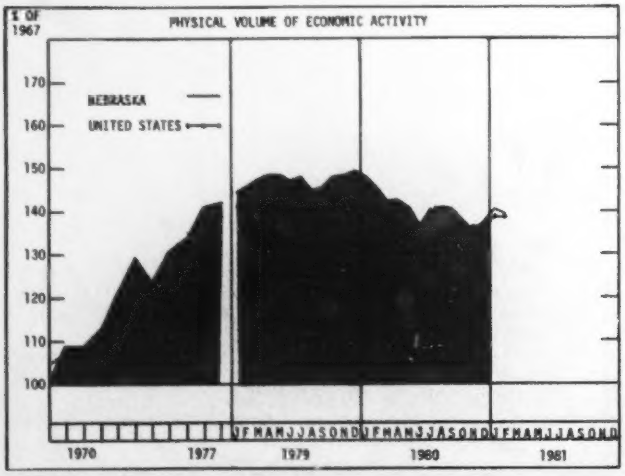
ECONOMIC INDICATORS: NEBRASKA AND UNITED STATES

1. CHANGE FROM PREVIOUS YEAR

February 1981	Current Month as Percent of Same Month Previous Year		1981 Year to Date as Percent of 1980 Year to Date	
Indicator	Nebraska	U.S.	Nebraska	U.S.
Dollar Volume	104.4	108.6	105.3	108.6
Agricultural	93.9	99.0	97.0	105.2
Nonagricultural	106.0	108.9	106.5	108.8
Construction	128.2	101.5	119.9	101.2
Manufacturing	100.4	106.5	102.4	107.1
Distributive	106.3	111.0	106.7	110.4
Government	106.9	108.2	107.7	108.2
Physical Volume	94.9	98.5	95.3	98.3
Agricultural	87.4	89.9	89.7	94.9
Nonagricultural	96.0	98.8	96.1	98.4
Construction	121.5	96.2	112.4	94.9
Manufacturing	91.6	96.7	92.9	96.7
Distributive	95.5	99.7	95.7	99.0
Government	99.7	100.4	99.8	100.6

2. CHANGE FROM 1967

Indicator	Percent of 1967 Average	
	Nebraska	U.S.
Dollar Volume	356.2	346.1
Agricultural	318.8	315.6
Nonagricultural	361.6	347.1
Construction	317.7	336.2
Manufacturing	368.7	311.4
Distributive	367.7	372.9
Government	360.7	327.3
Physical Volume	139.2	138.2
Agricultural	122.2	120.9
Nonagricultural	141.7	138.7
Construction	103.5	109.5
Manufacturing	160.7	133.3
Distributive	139.7	141.7
Government	146.1	150.3

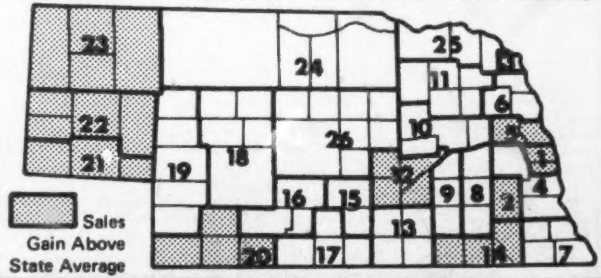


3. NET TAXABLE RETAIL SALES OF NEBRASKA REGIONS AND CITIES (Adjusted for Price Changes)

Region Number and City	City Sales*	Sales in Region*	
	Feb. 1981 as percent of Feb. 1980	Feb. 1981 as percent of Feb. 1980	Year to date'81 as percent of Year to date'80
The State	93.7	92.9	97.2
1 Omaha	97.6	97.6	101.5
Bellevue	104.0		
2 Lincoln	95.6	95.0	99.8
3 So. Sioux City	102.7	98.6	94.3
4 Nebraska City	104.9	91.4	96.2
5 Fremont	104.2	99.0	99.9
Blair	92.6		
6 West Point	96.8	84.8	88.4
7 Falls City	83.5	87.6	92.1
8 Seward	85.8	86.3	97.0
9 York	83.1	84.5	87.7
10 Columbus	72.7	79.5	92.8
11 Norfolk	95.2	92.2	91.2
Wayne	84.6		
12 Grand Island	101.3	98.9	99.9
13 Hastings	96.4	94.7	95.1
14 Beatrice	91.1	91.6	98.5
Fairbury	77.7		
15 Kearney	95.4	97.3	97.7
16 Lexington	109.3	98.9	94.5
17 Holdrege	101.8	93.0	95.4
18 North Platte	97.4	96.0	92.4
19 Ogallala	120.3	110.5	97.0
20 McCook	101.5	102.3	107.0
21 Sidney	104.5	106.4	105.0
Kimball	129.0		
22 Scottsbluff/Gering	99.8	99.1	98.8
23 Alliance	109.2	101.2	101.0
Chadron	132.8		
24 O'Neill	97.9	97.1	90.3
25 Hartington	82.1	86.6	88.0
26 Broken Bow	95.3	84.6	85.4

*State totals include sales not allocated to cities or regions. The year-to-year ratios for city and region sales may be misleading because of changes in the portion of unallocated sales. Region totals include, and city totals exclude, motor vehicle sales. Sales are those on which sales taxes are collected by retailers located in the state. Compiled from data provided by Nebraska Department of Revenue.

1981 YEAR TO DATE AS PERCENT OF 1980 YEAR TO DATE IN NEBRASKA'S PLANNING AND DEVELOPMENT REGIONS



(continued from page 4) The physical volume index was down 1.1% and is little changed from the August 1980 trough. Nebraska's physical volume output from the manufacturing sector expanded from September through December and has declined slightly since December 1980. The index is down 8.4% from February 1980 levels.

The distributive trade sector recorded a 2.7% drop in physical volume output during the interval January-February 1981. The state index increased sharply in January 1981 but fell back in February. Activity in the distributive trade sector remains below year-previous levels. The February reading places the physical volume output index for the distributive trade sector at its lowest point since June 1980.

The government sector recorded a slight increase in output in February 1981, the index of physical activity increasing 0.2%. This index has moved within very narrow limits during the past two years, and the February reading did not deviate from that trend.

Nebraska retail sales were up on a dollar volume basis in February 1981 but down in real terms. Total retail sales were approximately $652 million in February 1981 compared with $636 million in February 1980. Motor vehicle sales totaled approximately $60 million in February 1981 compared with $63 million in February 1980, while nonmotor vehicle sales in Nebraska were $592 million in February 1981 compared with $573 million a year earlier. Nonmotor vehicle sales were up 3.3% on a dollar-volume basis, while motor vehicle sales were down 5.2%. Overall, all retail sales were up 2.5% unadjusted for price changes.

In February 1981, the commodity component of the Consumer Price Index was up 10.3% compared with year-previous levels. When allowances are made for price increases, retail sales declined approximately 0.4% January-February 1981. On a year-to-date basis, retail sales in 1981 are running 1.6% below 1980 levels (real retail sales).

Some Nebraska cities recorded substantial gains in real retail sales in February 1981 compared with year-previous levels. Chadron, for instance, recorded an increase of 32.8%, while Kimball recorded an increase of 29%. With a 20.3% increase, Ogallala should also be included in the list of cities recording sharp gains in retail sales in February. Other notable gains in real retail sales include Lexington with an increase of 9.3%; Alliance, 9.2%; Sidney, 4.5%; Nebraska City, 4.9%; Fremont, 4.2%; and Bellevue, 4.0%.

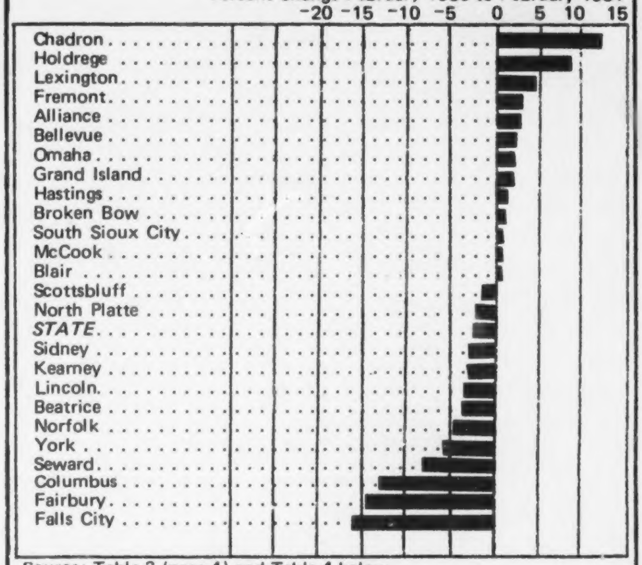
The city business indexes reflect the trends evident in the retail sales statistics. Chadron recorded the largest increase, 12.7%; followed by Holdrege, 8.7%; and Lexington, 4.4%. D. E. P.

5. PRICE INDEXES

February 1981	Index (1967 = 100)	Percent of Same Month Last Year	Year to Date as Percent of Same Period Last Year*
Consumer Prices	263.2	111.3	111.5
Commodity component	248.3	110.3	110.3
Wholesale Prices	286.9	110.3	110.7
Agricultural Prices			
United States	261.0	110.1	110.7
Nebraska	261.0	107.4	108.1

*Using arithmetic average of monthly indexes.
Sources: Consumer and Wholesale Prices: U.S. Bureau of Labor Statistics; Agricultural Prices: U.S. Department of Agriculture.

CITY BUSINESS INDEXES
Percent Change February 1980 to February 1981



Source: Table 3 (page 4) and Table 4 below.

4. FEBRUARY CITY BUSINESS INDICATORS

The State and Its Trading Centers	Percent of Same Month a Year Ago		
	Employment[1]	Building Activity[2]	Power Consumption[3]
The State	100.2	112.0	89.8
Alliance	102.9	55.2	98.1
Beatrice	99.5	100.9	80.7
Bellevue	99.7	111.7	99.6*
Blair	99.9	202.1	94.3
Broken Bow	100.5	160.0	87.3
Chadron	99.5	70.9	104.0
Columbus	100.5	66.9	90.8
Fairbury	101.3	33.7	81.2
Falls City	100.9	14.1	85.9
Fremont	103.2	86.5	94.8*
Grand Island	100.2	130.5	98.6
Hastings	102.0	142.6	70.8
Holdrege	100.1	506.1	101.4
Kearney	101.1	80.3	94.3
Lexington	100.8	97.4	80.4
Lincoln	98.3	89.0	84.2
McCook	100.8	84.1	96.1
Nebraska City	NA	NA	NA
Norfolk	100.2	56.7	88.1
North Platte	100.9	79.0	93.6
Omaha	99.7	194.0	89.6
Scottsbluff/Gering	101.1	84.3	95.8
Seward	100.1	73.2	81.5
Sidney	100.5	38.0	97.2
So. Sioux City	94.8	131.7	81.5*
York	101.2	147.4	71.7

[1] As a proxy for city employment, total employment for the county in which a city is located is used.

[2] Building Activity is the value of building permits issued as spread over an appropriate time period of construction. The U.S. Department of Commerce Composite Construction Cost Index is used to adjust construction activity for price changes.

[3] Power Consumption is a combined index of consumption of electricity and natural gas except in cases marked * for which only one is used.

Source: Compilation by Bureau of Business Research from reports of private and public agencies.

(continued from page 3)

Box Butte County, in the west, had the highest rate of net in-migration in the state, largely attributable to the Burlington and Northern development in Alliance. During the 1970-80 census period, the city of Alliance experienced a net in-migration of just over 2,500 people, a net in-migration rate of almost 26 percent.

Several of the more rural counties also experienced net in-migration in the 1970s. The development of irrigation in Perkins and Chase counties in the southwest and Brown and Rock counties in the north was perhaps an important factor in their improved migration figures. One might logically ask whether this migration development has caused a movement back to the farm or a movement to the towns within these counties which sell and service agriculturally related equipment. Since vital statistics are not published for smaller towns, migration figures for the farm and non-farm populations could not be determined. Other data give mixed indications. The total number of people living outside of incorporated towns increased significantly in Chase and Rock counties, slightly in Brown County, and decreased slightly in Perkins County during the 1970-80 period. Between 1969-78, the total number of farms selling more than $2,500 per year in crops and livestock increased in Chase, Perkins, and Rock counties, but fell in Brown County. The impact of irrigation development on migration in these counties, however, is somewhat tempered by the fact that Dundy and Holt counties, which have also experienced recent irrigation development, had a net out-migration during the same period.

Some of the other more rural counties which experienced in-migration were Franklin, Kearney, and Harlan in the south and Hooker in the Sandhills. This happened despite the fact that Franklin and Harlan counties experienced declines in population over the census period, that is, net in-migration was exceeded by the natural decrease (births minus deaths) in population. One can only guess that in these counties the out-migration of earlier census periods has substantially diminished the child-bearing cohort, causing natural decreases in population and leaving an aging population with less incentives to move. This would seem to characterize many of the southern tier of counties, which have experienced natural decreases in population over the 1970-80 period. In Hooker County, Mullen was likely the recipient of most of the in-migration, since it gained population over the 1970-80 period while the rest of the county remained stable. In any case, because the numbers are small in the rural counties mentioned above, trend interpretations for individual counties should be viewed with caution.

The in-migration of Madison, Stanton, and Dakota counties in the northeast are most likely related to the prosperity and development of the Norfolk and South Sioux City regions. Norfolk and South Sioux City had a net in-migration rate of +9.2 percent and +4.7 percent, respectively, over the 1970-80 period.

Although Douglas County experienced a net out-migration in the 1970s, the counties surrounding Douglas had significant in-migration over the same period. Much of this migration into Cass, Sarpy, Saunders, and Washington counties is likely due to the increased desire of people who work in urban areas to live in a rural setting. Within the counties just mentioned, major population increases in the 1970s occurred in areas bordering Douglas, Lancaster, and Dodge counties.

The net out-migration in Douglas County during the 1970s continued a phenomenon which began in the 1960s. Although net migration figures for areas within Douglas County are imprecise due to annexation, it is interesting to note that these figures show a considerable in-migration in areas outside of Omaha. This in-migration is, of course, more than offset by Omaha's net out-migration. The reasons for such migration patterns, characteristic of many metropolitan areas in the 1970s, are varied and complex, including not only economic, but other social forces as well.

Kimball County experienced the highest rate of net out-migration during the 1970s, largely due to circumstances peculiar to the county. During the 1950s and early 1960s, the discovery of oil and the installation of defense missiles resulted in a large influx of people. Outmigration in the late 1960s followed this initial development stage and has continued into the 1970s.

Overall, 1970-1980 has been a period when net out-migration from the state has nearly ceased, and a period when a significant number of counties have reversed a long trend of net out-migration. To the extent that migration is an indication of the changing economic and social vitality of an area, these figures should be viewed with cautious optimism.

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NEBRASKA RETAIL SALES, 1979-80

Net taxable sales in Nebraska were $8,921 million in 1980 (see Table 2, p. 2), up $188 million over the 1979 total of $8,733 million.

An examination of the geographic distribution of the gains in retail sales indicates that only seven of the state's planning regions recorded increases above the state's 2.1% dollar volume increase. Regions recording above-state-average gains are summarized in Table 2 and Map 1 (p. 3), and include Region 1, up 4.0%; Region 2, 4.8%; Region 12, 3.2%; Region 15, 2.1% (equal to the state average); Region 20, 3.3%; Region 21, 5.0%, and Region 22, 4.8%.

The meager extent of retail sales gains is illustrated by the fact that the highest percentage increase was recorded in Region 21 with a 5% increase. Five percent, of course, is well below the general increase in prices, meaning that most Nebraska areas had a decline in real retail sales in 1980.

When net taxable retail sales are adjusted for price changes, real retail sales were down approximately 9% in 1980. Using the commodity component of the Consumer Price Index, deflated net taxable retail sales were estimated at $8,029 million, down approximately $700 million in real terms from 1979. Adjusted and unadjusted retail sales data for 1979 and 1980 are presented in Table 2. Note that data for 1979 may not agree with that previously published, since minor data revisions have been made.

Before examining real retail sales, that is, dollar volume sales deflated by the commodity component of the Consumer Price Index, it should be noted that the Consumer Price Index is an imperfect deflator. The Index weights rapidly rising prices more heavily than less rapidly rising prices, distorting price changes in a period in which some items, such as housing and energy, rise more rapidly than others, such as clothing. By applying the commodity component of the Consumer Price Index, distortions introduced through housing are corrected, although caution still is advised in interpreting the deflated statistics for they affect individuals in very different ways. It should be stressed that the Consumer Price Index does not measure the cost of living.

With these limitations in mind, price-adjusted net taxable retail sales in Table 2 indicate that real retail sales declined in all regions. These declines range from a low of 6.4% in Region 21 and 6.6% in Region 22 and Region 2, to as high as 18.8% in Region 6 and 17.4% in Region 25. Other areas

(continued on page 3)

Table 1

NET TAXABLE RETAIL SALES[1] IN SELECTED NEBRASKA TRADING CENTERS, 1979 AND 1980
WITH PERCENTAGE CHANGES FOR SALES UNADJUSTED AND ADJUSTED FOR PRICE CHANGES

		Unadjusted for Price Changes			Adjusted for Prices[3]
Trade Center	Region[2]	Thousands of Dollars		Percent of Change	Percent of Change
		1979	1980		
Alliance	23	62,281	63,768	2.4	-8.7
Beatrice	14	82,502	84,484	2.4	-8.7
Bellevue	1	93,885	96,017	2.3	-8.8
Broken Bow	26	38,488	40,409	5.0	-6.4
Chadron	23	36,420	35,624	-2.2	-12.8
Columbus	10	135,666	140,353	3.5	-7.8
Fairbury	14	35,019	33,344	-4.8	-15.2
Falls City	7	31,454	31,401	-0.2	-11.1
Fremont	5	153,657	152,271	-0.9	-11.7
Grand Island	12	320,252	339,871	6.1	-5.4
Hartington	25	17,885	17,176	-4.0	-14.4
Hastings	13	164,650	167,281	1.6	-9.4
Holdrege	17	53,415	55,524	3.9	-7.4
Kearney	15	155,988	161,580	3.6	-7.7
Kimball	21	29,393	34,617	17.8	5.0
Lexington	16	56,355	56,584	0.4	-10.5
Lincoln	2	904,897	960,523	6.1	-5.4
McCook	20	76,710	78,047	1.7	-9.4
Nebraska City	4	44,872	45,026	0.3	-10.6
Norfolk	11	170,754	167,030	-2.2	-12.8
North Platte	18	180,105	173,262	-3.8	-14.3
Ogallala	19	51,910	50,102	-3.5	-14.0
O'Neill	24	42,202	42,587	0.9	-10.1
Omaha	1	2,209,195	2,331,895	5.6	-5.9
Scottsbluff/Gering	22	183,058	194,279	6.1	-5.4
Seward	8	40,093	40,264	0.4	-10.5
Sidney	21	38,227	38,872	1.7	-9.4
So.Sioux City	3	36,471	38,094	4.5	-6.9
Wayne	11	35,548	34,506	-2.9	-13.5
West Point	6	30,052	29,062	-3.3	-13.8
York	9	66,415	69,852	5.2	-6.2
Total 30 Centers		5,577,819	5,803,705	4.0	-7.3
Total State[4]		7,776,581	8,099,608	4.2	-7.1

[1] Excluding motor vehicle sales.
[2] Nebraska Planning and Development Regions.
[3] Current dollar sales adjusted (deflated) for price changes using commodity prices component of the Bureau of Labor Statistics' Consumer Price Index.
[4] Total state retail sales include some retail sales that cannot be allocated to cities, counties, or regions.
Source: Compilations by Bureau of Business Research from special tabulations provided by Nebraska Tax Commissioner.

Table 2

NET TAXABLE RETAIL SALES[1] IN NEBRASKA'S PLANNING AND DEVELOPMENT REGIONS, 1979 AND 1980 BY COUNTIES, WITH PERCENTAGE CHANGES FOR SALES UNADJUSTED AND ADJUSTED FOR PRICE CHANGES

Region and County	Unadjusted for Price Changes			Adjusted for Prices[2]
	Thousands of Dollars		Percent of Change	Percent of Change
	1979	1980		
Region 1	2,649,059	2,754,605	+ 4.0	- 7.3
Douglas	2,473,484	2,573,622	+ 4.0	- 7.3
Sarpy	175,575	180,983	+ 3.1	- 8.1
Region 2	1,010,753	1,059,509	+ 4.8	- 6.6
Lancaster	1,010,753	1,059,509	+ 4.8	- 6.6
Region 3	58,202	57,479	- 1.2	-11.9
Dakota	58,202	57,479	- 1.2	-11.9
Region 4	200,169	189,340	- 5.4	-15.7
Cass	55,368	54,664	- 1.3	-12.0
Otoe	77,853	74,405	- 4.4	-14.8
Saunders	66,948	60,271	-10.0	-19.8
Region 5	268,591	260,870	- 2.9	-13.5
Dodge	208,778	202,844	- 2.8	-13.4
Washington	59,813	58,026	- 3.0	-13.5
Region 6	114,955	104,767	- 8.9	-18.8
Burt	39,804	37,048	- 6.9	-17.0
Cuming	59,523	53,965	- 9.3	-19.2
Thurston	15,628	13,754	-12.0	-21.6
Region 7	114,495	108,583	- 5.2	-15.5
Johnson	20,184	19,375	- 4.0	-14.4
Nemaha	32,406	31,056	- 4.2	-14.6
Pawnee	12,082	11,333	- 6.2	-16.4
Richardson	49,823	46,819	- 6.0	-16.2
Region 8	158,385	152,371	- 3.8	-14.3
Butler	31,927	30,553	- 4.3	-14.7
Seward	63,231	61,890	- 2.1	-12.7
Saline	63,227	59,928	- 5.2	-15.5
Region 9	159,921	158,159	- 1.1	-11.9
Fillmore	41,132	39,372	- 4.3	-14.7
Polk	27,312	24,957	- 8.6	-18.5
York	91,477	93,830	+ 2.6	- 8.6
Region 10	279,529	272,773	- 2.4	-13.0
Boone	37,368	34,894	- 6.6	-16.8
Colfax	46,801	44,698	- 4.5	-14.9
Nance	15,345	15,010	- 2.2	-12.8
Platte	180,015	178,171	- 1.0	-11.8
Region 11	345,351	326,042	- 5.6	-15.9
Antelope	36,483	34,742	- 4.8	-15.2
Madison	221,264	210,868	- 4.7	-15.1
Pierce	30,514	28,243	- 7.4	-17.5
Stanton	12,523	11,048	-11.8	-21.4
Wayne	44,567	41,141	- 7.7	-17.7
Region 12	463,246	478,173	+ 3.2	- 8.0
Hall	362,045	380,197	+ 5.0	- 6.4
Hamilton	38,351	39,087	+ 1.9	- 9.2
Howard	26,366	24,364	- 7.6	-17.6
Merrick	36,484	34,525	- 5.4	-15.7
Region 13	278,788	277,294	- 0.5	-11.3
Adams	189,778	190,895	+ 0.6	-10.3
Clay	35,511	34,731	- 2.2	-12.8
Nuckolls	34,468	34,162	- 0.9	-11.7
Webster	19,031	17,506	- 8.0	-18.0
Region 14	198,535	193,718	- 2.4	-13.0
Gage	113,327	111,885	- 1.3	-12.0
Jefferson	51,210	48,326	- 5.6	-15.9
Thayer	33,998	33,507	- 1.4	-12.1
Region 15	240,917	245,860	+ 2.1	- 9.0
Buffalo	209,880	213,860	+ 1.9	- 9.2
Kearney	31,037	32,000	+ 3.1	- 8.1

Region and County	Unadjusted for Price Changes			Adjusted for Prices[2]
	Thousands of Dollars		Percent of Change	Percent of Change
	1979	1980		
Region 16	153,638	152,358	- 0.8	-11.6
Dawson	132,987	131,112	- 1.4	-12.1
Frontier	11,562	11,241	- 2.8	-13.4
Gosper	9,089	10,005	+10.1	- 1.9
Region 17	131,418	132,238	+ 0.6	-10.3
Franklin	18,034	16,818	- 6.7	-16.8
Furnas	27,096	27,975	+ 3.2	- 8.0
Harlan	18,112	17,768	- 1.9	-12.6
Phelps	68,176	69,677	+ 2.2	- 8.9
Region 18	227,903	214,360	- 5.9	-16.1
Hooker	4,062	3,780	- 6.9	-17.0
Lincoln	216,215	203,902	- 5.7	-16.0
Logan	2,176	1,963	- 9.8	-19.7
McPherson	1,002	694	-30.7	-38.2
Thomas	4,448	4,021	- 9.6	19.4
Region 19	122,797	122,000	- 0.6	-11.4
Arthur	1,307	1,161	-11.2	-20.9
Chase	31,378	33,388	+ 6.4	- 5.2
Grant	3,696	3,902	+ 5.6	- 5.9
Keith	64,746	62,124	- 4.0	-14.4
Perkins	21,670	21,425	- 1.1	-11.9
Region 20	114,949	118,715	+ 3.3	- 7.9
Dundy	11,352	12,480	+ 9.9	- 2.1
Hayes	2,469	2,361	- 4.4	-14.8
Hitchcock	10,137	11,729	+15.7	+ 3.1
Red Willow	90,991	92,145	+ 1.3	- 9.7
Region 21	95,395	100,184	+ 5.0	- 6.4
Cheyenne	49,434	49,858	+ 0.9	-10.1
Deuel	11,410	10,545	- 7.6	-17.6
Kimball	34,551	39,781	+15.1	+ 2.6
Region 22	270,480	283,479	+ 4.8	- 6.6
Banner	1,661	1,671	+ 0.6	-10.3
Garden	11,364	10,730	- 5.6	-15.9
Morrill	32,692	32,197	- 1.5	-12.2
Scotts Bluff	224,763	238,881	+ 6.3	- 5.3
Region 23	169,384	171,374	+ 1.2	- 9.8
Box Butte	74,270	76,177	+ 2.6	- 8.6
Dawes	47,376	46,467	- 1.9	-12.6
Sheridan	44,123	44,995	+ 2.0	- 9.1
Sioux	3,615	3,735	+ 3.3	- 7.9
Region 24	173,558	164,300	- 5.3	-15.6
Boyd	11,487	10,323	-10.1	-19.9
Brown	26,698	26,392	- 1.1	-11.9
Cherry	36,944	34,817	- 5.8	-16.0
Holt	77,874	75,348	- 3.2	-13.7
Keya Paha	2,936	2,601	-11.4	-21.0
Rock	17,619	14,819	-15.9	-25.0
Region 25	108,693	100,807	- 7.3	-17.4
Cedar	45,706	42,146	- 7.8	-17.8
Dixon	16,962	15,311	- 9.7	-19.5
Knox	46,025	43,350	- 5.8	-16.0
Region 26	144,625	139,932	- 3.2	-13.7
Blaine	2,169	2,305	+ 6.3	- 5.3
Custer	68,481	67,976	- 0.7	-11.5
Garfield	11,987	12,175	+ 1.6	- 9.4
Greeley	12,213	11,732	- 3.9	-14.3
Loup	1,686	1,486	-11.9	-21.5
Sherman	15,605	13,780	-11.7	-21.3
Valley	29,755	27,717	- 6.8	-16.9
Wheeler	2,729	2,761	+ 1.2	- 9.8
State Total[3]	8,733,485	8,920,736	+ 2.1	- 9.0

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[1] Motor vehicle sales are recorded as in counties in which the vehicles were first registered regardless of point of sale.

[2] Current dollar sales adjusted (deflated) for price changes using commodity prices component of the Bureau of Labor Statistics' Consumer Price Index.

[3] Total state retail sales include some retail sales that cannot be allocated to cities, counties, or regions.

Source: Compilation by Bureau of Business Research, University of Nebraska-Lincoln, from tabulations provided by the Nebraska Tax Commissioner.

(continued from page 3)

Real retail sales in Nebraska increased more rapidly than inflation. The best available measure is the commodity component of the Consumer Price Index. This measure is not ideal, but it is probably a better measure of trends in retail sales than the entire Consumer Price Index. Over the decade 1970-80, the commodity component of the Consumer Price Index increased 118%. Since retail sales in Nebraska were up approximately 170%, this indicates a real gain of nearly 44%.

Counties where retail sales increased most rapidly during the 1970s include Wheeler County, up 250%; Chase County, +248%; Box Butte, +243%; Banner, +240%; Gosper, +223%; Rock, +222%; Holt, +210%; Buffalo, +209%; Morrill, +207%; Hall, +206%; and Perkins, +201%. With the exception of Box Butte, Buffalo, Hall, and Holt counties, retail sales in the remaining six counties totaled less than $35 million in 1980. In other words, the percentage increases for some of the counties was coming upon exceedingly small dollar volume sales. Wheeler County, for instance, recorded retail sales of $2.8 million in 1980 and Gosper County recorded retail sales of approximately $10 million.

Box Butte, Buffalo, Hall, and Holt counties had more substantial sales and consequently were less affected by the small numbers phenomenon. Holt County, which ranked seventh, recorded an increase in retail sales from $24 million in 1970 to more than $75 million in 1980. Box Butte County, where growth has been stimulated by the Burlington and Northern in Alliance, recorded an increase in retail sales from $22 million to more than $76 million over the decade.

The state's two largest retailing areas, Douglas and Lancaster counties, had real gains in retail sales, but Douglas County failed to match the state average in terms of growth. Retail sales in Lancaster County totaled $399 million in 1970 and $1,060 million in 1980 for an increase over the decade of 165%.

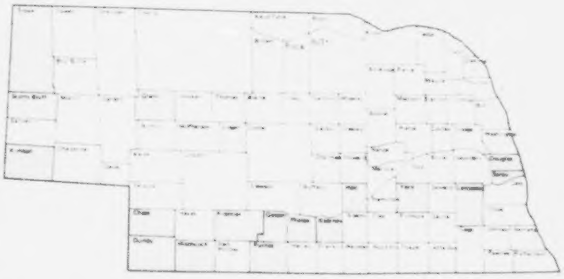
A number of the state's counties recorded real gains in retail sales and these are indicated by the shaded areas in Map 3. Gains above the state average were well dispersed across the state. Decade indications of changes in retail sales for counties are available upon request from the Bureau of Business Research, 200 CBA, University of Nebraska-Lincoln, Lincoln, NE 68588.

D. E. P.

Map 2

COUNTIES RECORDING ABOVE-STATE AVERAGE GAINS IN NET TAXABLE RETAIL SALES DOLLAR VOLUME

1979-1980

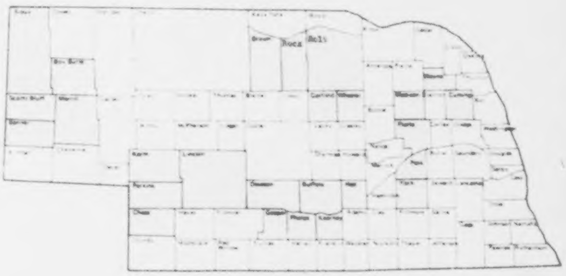


☐ Increase above state average.

Map 3

COUNTIES RECORDING PERCENT OF CHANGE IN RETAIL TRADE ABOVE STATE AVERAGE

1970-1980



☐ Increase above state average.

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Review and Outlook

Business activity in Nebraska improved slightly in March from its February level. The Nebraska physical volume index was up 0.2% in March after total output was adjusted for price changes. Data for Nebraska's agriculture sector was unavailable as this report was being prepared, but should be available next month.

All sectors of the Nebraska nonagriculture economy except government showed improvements on a February-to-March basis. Construction recorded the largest increase, with the physical volume index up 2.7%. The construction industry has come back somewhat from the depressed 1980 conditions in Nebraska. The March 1981 figure compared with year-earlier data for the construction industry shows an increase of 30.6%. The construction index reached its low in June of 1980 and has increased nearly 60% over the nine-month interval. While activity in the construction sector has improved in the last few months, the March 1981 reading remains approximately 8% below the March 1979 level of activity in this sector.

Output in Nebraska's manufacturing sector increased 1.3% in March over the February level. Physical volume output in manufacturing has changed very little over the past four months. Activity is up from the August 1980 trough, but below levels of one and two years previous.

The distributive trade sector recorded a modest 0.2% increase in March. The distributive trade sector reached its low in June 1980 and has moved erratically ahead

(continued on page 5)

Notes for Tables 1 and 2: (1) The "distributive" indicator represents a composite of wholesale and retail trade; transportation, communication and utilities; finance, insurance, and real estate, and selected services. (2) The "physical volume" indicator and its components represent the dollar volume indicator and its components adjusted for price changes using appropriate price indexes—see Table 5, page 5.

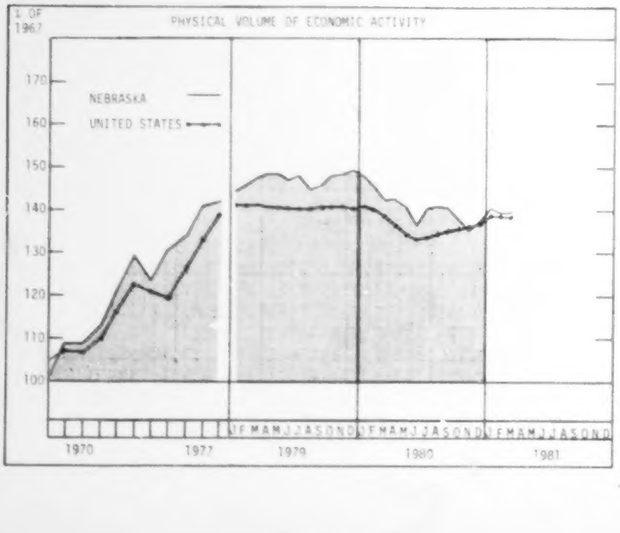
ECONOMIC INDICATORS: NEBRASKA AND UNITED STATES

1. CHANGE FROM PREVIOUS YEAR

March 1981	Current Month as Percent of Same Month Previous Year		1981 Year to Date as Percent of 1980 Year to Date	
Indicator	Nebraska	U.S.	Nebraska	U.S.
Dollar Volume	105.8	109.4	105.4	109.0
Agricultural	NA		NA	
Nonagricultural	107.7	109.6	106.9	109.1
Construction	139.9	104.6	126.2	102.5
Manufacturing	104.1	107.2	102.9	107.1
Distributive	108.0	111.4	107.1	110.8
Government	102.8	108.3	106.0	108.2
Physical Volume	96.8	99.3	95.8	98.7
Agricultural	NA		NA	
Nonagricultural	97.9	99.4	96.7	98.8
Construction	130.5	97.6	118.1	95.9
Manufacturing	94.7	97.1	93.4	96.9
Distributive	97.7	100.8	96.3	99.7
Government	97.0	99.6	98.8	100.2

2. CHANGE FROM 1967

Indicator	Percent of 1967 Average	
	Nebraska	U.S.
Dollar Volume	356.2	348.3
Agricultural	NA	NA
Nonagricultural	364.9	349.4
Construction	331.7	330.2
Manufacturing	375.6	312.9
Distributive	370.9	376.6
Government	354.7	328.5
Physical Volume	139.2	138.0
Agricultural	NA	NA
Nonagricultural	141.9	138.5
Construction	106.3	105.8
Manufacturing	162.6	132.5
Distributive	139.9	142.1
Government	143.0	149.8

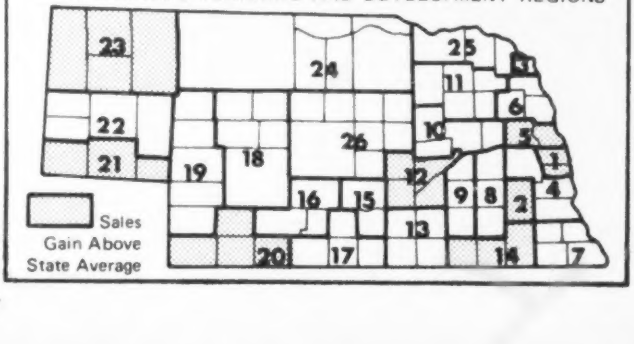


3. NET TAXABLE RETAIL SALES OF NEBRASKA REGIONS AND CITIES (Adjusted for Price Changes)

Region Number and City	City Sales*	Sales in Region*	
	March 1981 as percent of March 1980	March 1981 as percent of March 1980	Year to date'81 as percent of Year to date'80
The State	100.2	101.0	98.5
1 Omaha	101.4	103.6	102.3
Bellevue	99.0		
2 Lincoln	104.9	106.4	102.1
3 So. Sioux City	100.0	98.1	95.7
4 Nebraska City	93.4	98.0	96.8
5 Fremont	99.9	98.2	99.2
Blair	88.2		
6 West Point	100.7	93.7	90.2
7 Falls City	94.6	98.3	94.2
8 Seward	99.1	99.1	97.7
9 York	104.6	96.5	90.7
10 Columbus	95.1	90.3	91.9
11 Norfolk	99.7	97.7	93.5
Wayne	70.0		
12 Grand Island	103.2	103.3	101.1
13 Hastings	104.8	102.7	97.8
14 Beatrice	108.7	103.5	100.2
Fairbury	98.2		
15 Kearney	102.1	98.1	97.9
16 Lexington	98.1	94.2	94.4
17 Holdrege	100.8	95.3	95.3
18 North Platte	97.2	97.6	94.3
19 Ogallala	123.7	92.5	95.4
20 McCook	106.1	99.8	104.4
21 Sidney	84.8	96.5	101.7
Kimball	104.4		
22 Scottsbluff/Gering	97.6	97.7	98.4
23 Alliance	102.1	97.5	99.1
Chadron	93.6		
24 O'Neill	89.4	94.4	91.7
25 Hartington	88.9	87.1	87.6
26 Broken Bow	97.0	88.9	86.6

*State totals include sales not allocated to cities or regions. The year-to-year ratios for city and region sales may be misleading because of changes in the portion of unallocated sales. Region totals include, and city totals exclude, motor vehicle sales. Sales are those on which sales taxes are collected by retailers located in the state. Compiled from data provided by Nebraska Department of Revenue.

1981 YEAR TO DATE AS PERCENT OF 1980 YEAR TO DATE IN NEBRASKA'S PLANNING AND DEVELOPMENT REGIONS



(continued from page 4)

since that point. The index is now approximately 3% above its June 1980 level.

Output in the government sector continues to decline. The March 1981 physical volume index for the public sector was below readings recorded in 1980 and 1979. The index was down 2.1% on a February-to-March basis.

Cash farm marketing receipts were unavailable, as noted above, but it is of interest to note prices received and prices paid by the agriculture sector. On a seasonally unadjusted basis, prices received by Nebraska farmers were down 4.2% February to March. When comparisons were made over twelve months, prices received by Nebraska farmers were up 4.2%. Prices received by U.S. farmers declined 1.9% February to March, but were up 10.4% when prices are compared on an annual basis. Prices received by U.S. farmers were somewhat more favorable than those received by Nebraska farmers. Prices paid by all farmers were up 9.4%, indicating an improving situation for U.S. farmers over the interval March 1980–March 1981.

Nebraska retail sales were up 10.7% on a dollar volume basis March 1980–March 1981. Motor vehicles sales were up 18.5% over the twelve-month interval, while nonmotor vehicles sales were up 9.7%.

When adjustments are made for the rising prices, total retail sales were up 1 percent in real terms. Motor vehicles sales were up 8.2% in price-adjusted terms, while nonmotor vehicles sales were up 0.2%.

Inflation continues to moderate slowly, with the commodity component of the Consumer Price Index showing a 9.6% increase above the same month in 1980. All consumer prices were 10.6% higher in March 1981 compared with the year-earlier data. The rate of increase in the Consumer Price Index and the commodity component of this index has, of course, slowed since March 1981, which provides encouragement as future price reports will contain improved inflation news.

Strength in retail sales was noted in several Nebraska cities. Ogallala led all cities with a real increase of 23.7% March 1980–March 1981. Other notable real increases include Beatrice, 8.2%; McCook, 6.1%; Lincoln, 4.9%; York, 4.6%; Hastings, 4.8%; Kimball, 4.4%; and Grand Island, 3.2%. Cities showing substantial gains in the city indexes include Holdrege, Beatrice, Hastings, York, McCook, and Omaha.

Nebraska's employment picture remains somewhat depressed compared with year-previous levels. Total employment in Nebraska in March 1981 was estimated at approximately 741,000, 9,000 below March 1980 levels. Unemployment was up approximately 6,000 over the same interval, and the unemployment rate was 4.8% in March, 1981.

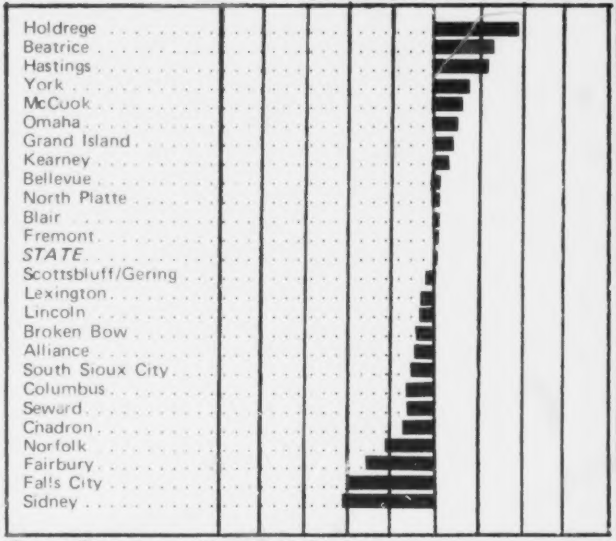
D. E. P.

5. PRICE INDEXES

March 1981	Index (1967 = 100)	Percent of Same Month Last Year	Year to Date as Percent of Same Period Last Year*
Consumer Prices	265.1	110.6	111.2
Commodity component	249.8	109.6	110.1
Wholesale Prices	289.6	110.6	110.7
Agricultural Prices			
United States	254.0	110.4	110.6
Nebraska	247.0	104.2	106.9

*Using arithmetic average of monthly indexes.
Sources: Consumer and Wholesale Prices: U.S. Bureau of Labor Statistics; Agricultural Prices: U.S. Department of Agriculture.

CITY BUSINESS INDEXES
Percent Change March 1980 to March 1981



Source: Table 3 (page 4) and Table 4 below.

4. MARCH CITY BUSINESS INDICATORS

The State and Its Trading Centers	Employment[1]	Building Activity[2]	Power Consumption[3]
	Percent of Same Month a Year Ago		
The State	99.5	104.7	84.1
Alliance	100.5	49.9	85.0
Beatrice	100.0	182.6	79.2
Bellevue	99.0	126.6	88.4*
Blair	99.7	317.6	114.2
Broken Bow	100.3	84.8	102.7
Chadron	99.1	88.3	81.4
Columbus	100.7	79.8	80.4
Fairbury	101.0	22.4	72.8
Falls City	100.7	19.3	83.2
Fremont	103.3	76.8	95.6*
Grand Island	99.8	120.3	91.8
Hastings	101.4	169.8	48.5
Holdrege	101.1	574.7	133.5
Kearney	100.6	113.5	86.5
Lexington	100.8	83.4	89.3
Lincoln	95.2	66.4	85.4
McCook	101.0	88.5	86.2
Nebraska City	100.7	NA	80.2
Norfolk	99.8	36.1	89.4
North Platte	100.0	134.9	86.6
Omaha	99.0	162.7	82.7
Scottsbluff/Gering	101.2	95.9	67.5
Seward	99.7	60.3	89.7
Sidney	100.4	46.6	83.8
So. Sioux City	93.7	99.8	87.9*
York	100.9	116.7	76.3

[1] As a proxy for city employment, total employment for the county in which a city is located is used.

[2] Building Activity is the value of building permits issued as spread over an appropriate time period of construction. The U.S. Department of Commerce Composite Construction Cost Index is used to adjust construction activity for price changes.

[3] Power Consumption is a combined index of consumption of electricity and natural gas except in cases marked * for which only one is used.

Source: Compilation by Bureau of Business Research from reports of private and public agencies.

(continued from page 3)

Real retail sales in Nebraska increased more rapidly than inflation. The best available measure is the commodity component of the Consumer Price Index. This measure is not ideal, but it is probably a better measure of trends in retail sales than the entire Consumer Price Index. Over the decade 1970-80, the commodity component of the Consumer Price Index increased 118%. Since retail sales in Nebraska were up approximately 170%, this indicates a real gain of nearly 44%.

Counties where retail sales increased most rapidly during the 1970s include Wheeler County, up 250%; Chase County, +248%; Box Butte, +243%; Banner, +240%; Gosper, +223%; Rock, +222%; Holt, +210%; Buffalo, +209%; Morrill, +207%; Hall, +206%; and Perkins, +201%. With the exception of Box Butte, Buffalo, Hall, and Holt counties, retail sales in the remaining six counties totaled less than $35 million in 1980. In other words, the percentage increases for some of the counties was coming upon exceedingly small dollar volume sales. Wheeler County, for instance, recorded retail sales of $2.8 million in 1980 and Gosper County recorded retail sales of approximately $10 million.

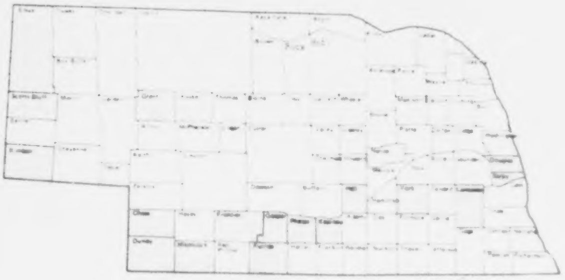
Box Butte, Buffalo, Hall, and Holt counties had more substantial sales and consequently were less affected by the small numbers phenomenon. Holt County, which ranked seventh, recorded an increase in retail sales from $24 million in 1970 to more than $75 million in 1980. Box Butte County, where growth has been stimulated by the Burlington and Northern in Alliance, recorded an increase in retail sales from $22 million to more than $76 million over the decade.

The state's two largest retailing areas, Douglas and Lancaster counties, had real gains in retail sales, but Douglas County failed to match the state average in terms of growth. Retail sales in Lancaster County totaled $399 million in 1970 and $1,060 million in 1980 for an increase over the decade of 165%.

A number of the state's counties recorded real gains in retail sales and these are indicated by the shaded areas in Map 3. Gains above the state average were well dispersed across the state. Decade indications of changes in retail sales for counties are available upon request from the Bureau of Business Research, 200 CBA, University of Nebraska-Lincoln, Lincoln, NE 68588.

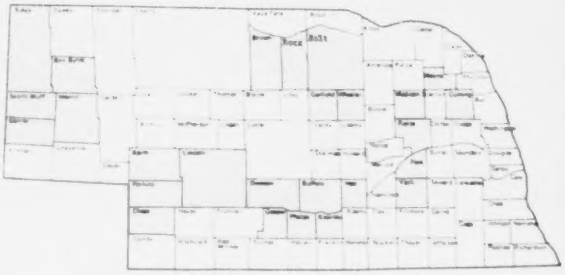
D. E. P.

Map 2
COUNTIES RECORDING ABOVE-STATE-AVERAGE GAINS
IN NET TAXABLE RETAIL SALES DOLLAR VOLUME
1979-1980



☐ Increase above state average.

Map 3
COUNTIES RECORDING PERCENT OF CHANGE
IN RETAIL TRADE ABOVE STATE AVERAGE
1970-1980



☐ Increase above state average.

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CRUDE OIL PRODUCTION IN NEBRASKA

Oil has been produced in Nebraska since 1939 when the first well in the state was completed in Richardson County. Production rose rapidly to 1,900,000 barrels by 1941 before decreasing to 290,000 barrels in 1949. Discoveries of new fields in Nebraska's panhandle region during 1949 led to a sustained increase of production during the 1950s. Subsequent discoveries in the southwestern portion of the state helped push state production to its historical peak of 24,884,761 barrels in 1962. Since that time, activity has fallen to a low of 5,862,277 barrels in 1978 before increasing slightly to 6,068,019 barrels in 1979. Production rose again in 1980 to 6,239,652 barrels. The 1980 total represented approximately 0.2 percent of total domestic production of crude oil during 1980.[1] Although state production is small in both absolute and relative terms, the importance of the oil industry to Nebraska, and particularly to the counties where oil is produced, cannot be disregarded. The industry provides a source of income and employment in the areas where production occurs and also generates government revenues via severance taxes, property taxes, and royalty payments.

Table 1 contains historical data on production, estimated value, and wells in Nebraska since the peak production year of 1962. The data in the table show that state production fell off very rapidly after 1962 and by 1969 stood at only half of the peak production level. This downward trend continued until 1975, with production in that year being only a quarter of the level posted in 1962. Since 1975, production has fluctuated around a plateau of roughly 6,000,000 barrels per year. The total value of Nebraska oil also suffered a precipitous decline during 1962-1973, due to relatively steady prices for oil coupled with the production declines during that time period. Prices increased following the oil embargo and have continued to climb since 1974, causing the value of Nebraska oil to increase rapidly. For example the estimated price per barrel of Nebraska oil in 1979 was $16.81, which implies a total value of $102 million for state production in 1979. Comparing this value figure to the 1973 production value of $28 million illustrates the effect of the price increases during the post-embargo period.

Two broad factors that have contributed to the historical decrease in oil production can be (continued on page 2)

Table 1
NEBRASKA OIL PRODUCTION, VALUE, AND WELLS, 1962-1980

Year	Oil Production (000s barrels)	Estimated Value (millions $)	Estimated Price/ Barrel	Producing Wells	Barrels/ Well	T.A.* or Shut-In Wells
1962	24,885	$70.4	$2.83	1,763	14,115	390
1963	21,846	61.8	2.83	1,732	12,613	446
1964	19,114	51.6	2.70	1,711	11,171	468
1965	17,216	45.8	2.66	1,611	10,687	556
1966	13,850	37.7	2.72	1,511	9,166	583
1967	13,373	36.8	2.75	1,430	9,352	609
1968	13,183	36.8	2.79	1,403	9,396	583
1969	12,106	36.1	2.98	1,305	9,277	613
1970	11,451	35.4	3.09	1,244	9,206	646
1971	10,062	34.0	3.38	1,191	8,448	557
1972	8,705	29.4	3.38	1,114	7,814	645
1973	7,240	28.0	3.87	1,107	6,540	550
1974	6,611	45.2	6.83	1,127	5,866	467
1975	6,120	55.1	9.01	1,190	5,143	437
1976	6,182	55.6	8.99	1,291	4,789	390
1977	5,968	62.4	10.46	1,382	4,318	383
1978	5,862	66.8	11.40	1,469	3,990	401
1979	6,068	102.0	16.81	1,551	3,912	394
1980	6,240	NA	NA	1,693	3,686	409

*Temporarily abandoned.

Sources: Nebraska Oil and Gas Conservation Commission; *Minerals Yearbook*, U.S. Bureau of Mines, various annual issues; and independent estimates.

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[1] "Crude Petroleum, Petroleum Products, and Natural Gas Liquids," *Energy Data Reports*, Department of Energy, Energy Information Administration, December 1980.

(continued from page 1)

identified from the data in Table 1. The first factor is price per barrel, which was relatively constant and hovered in the area of $3.00 from 1962 until the embargo. If prices had been increasing during this period, there would have been a mitigating effect on the downward movement of production. However, moderate price increases would not have stopped the trend entirely. The second and probably most important factor to be noted is the apparent decline in the production potential of existing oil fields. This effect is apparent when the data on yearly barrels per well are examined. Since 1962, this measure has fallen in a consistent manner from 14,115 barrels per well to 3,686 barrels per well in 1980. Thus, Nebraska wells have become less and less productive over time. Although Nebraska production has leveled off in the range of 6,000,000 barrels per year since 1975, the number of wells has grown since that year from 1,190 to 1,693 in 1980. In essence, more and more wells have been required to sustain state production at its current plateau. As might be expected in this situation, the majority of wells completed after 1975 have been development wells, that is, wells drilled in fields that are currently producing oil.

Table 2 contains the historical data concerning completions of oil and natural gas wells, the latter being an extremely small component of the total. Figures are given for both the development and wildcat types, the latter being wells drilled outside the boundaries of producing fields. "Success ratios," the ratios of new producing wells to total wells completed, for the two types of wells

Table 2
WELLS COMPLETED AND DRILLING PERMITS ISSUED
IN NEBRASKA, 1962-1980

	Wildcat Wells			Development Wells			Drilling Permits	
Year	Producing	D&A*	Success Ratio	Producing	D&A	Success Ratio	Exploratory	Development
1962	NA	NA	NA	NA	NA	NA	419	240
1963	21	253	.08	127	85	.60	295	222
1964	27	233	.10	118	89	.57	272	217
1965	11	242	.04	79	87	.48	262	165
1966	21	166	.11	64	67	.49	180	142
1967	12	128	.09	40	56	.42	148	115
1968	21	119	.15	45	44	.51	156	98
1969	10	235	.04	40	68	.37	241	109
1970	11	159	.06	32	51	.39	158	84
1971	10	125	.07	42	40	.51	150	96
1972	9	176	.05	44	56	.44	182	99
1973	7	94	.07	31	47	.40	110	71
1974	12	145	.08	40	75	.35	195	129
1975	26	175	.13	55	100	.35	212	160
1976	18	164	.10	53	76	.41	202	144
1977	32	178	.15	94	117	.45	267	237
1978	41	222	.16	107	101	.51	285	205
1979	57	226	.20	112	91	.55	320	255
1980	37	231	.14	146	113	.56	309	311

*Drilled and abandoned.
Source: Nebraska Oil and Gas Conservation Commission.

Table 3
COUNTY OIL PRODUCTION AND WELLS, 1980

County	Oil Production (barrels)	Change from 1979 (barrels)	1980 Rank	Producing Wells (as of Dec. 31)	Barrels/ Well	T.A.* or Shut-In Wells
Banner	577,522	−50,618	5	194	2,977	56
Cheyenne	1,248,151	−32,637	2	284	4,395	45
Deuel	108	−430	14	0	108	1
Dundy	166,754	−7,132	7	33	5,053	3
Frontier	99,364	5,572	9	15	6,624	3
Furnas	2,057	−390	13	1	2,057	2
Garden	6,217	−113	12	2	3,109	1
Harlan	25,787	5,175	11	10	2,579	0
Hitchcock	897,679	200,865	4	264	3,400	42
Kimball	1,215,874	125,054	3	337	3,608	108
Lincoln	877	544	15	1	877	0
Morrill	251,849	−14,258	6	62	4,062	21
Red Willow	1,555,410	−63,428	1	424	3,668	94
Richardson	45,286	3,329	10	30	1,510	28
Scotts Bluff	146,717	100	8	36	4,073	5
State Total:	6,239,652	171,633		1,693	3,686	409

*Temporarily abandoned.
Source: Nebraska Oil and Gas Conservation Commission.

are also listed, as are drilling permits issued by year. Table 2 does show that yearly completions of wildcat wells have been higher in the post-embargo period. However, these discoveries of new fields have not yet been able to increase state production significantly. Rather, it would seem that recently completed wildcat wells have merely offset production declines experienced in some of the older, more established fields.

Some appreciation of the intentions of industry members is gained by examining the data on drilling permits presented in Table 2. Issued permits have grown in the post-embargo period, largely in response to past price increases of oil and anticipation of even higher prices in the future. Wildcat permits totaled 309 in 1980, the second highest number since 1962, while development permits reached 311 in 1980, the highest number in the 1962-1980 time span. Although the number of development permits indicates a commitment to sustain production in established fields, the recent growth in wildcat permits is even more encouraging. Current and future prices appear to be stimulating exploration in new areas which may eventually augment production. The most promising development in this regard has been the increased interest in "deep drilling." In Nebraska, such activity refers to wells roughly 7,000 feet or more in depth. Industry members and observers have been optimistic about possible discoveries in these deeper zones.

COUNTY BREAKDOWN OF ACTIVITY

Oil was produced in fifteen counties during 1980, with Red Willow County having the highest total of 1,555,410 barrels. Table 3 reports all county totals for 1980, while Figure 1 is a state map that indicates the counties with oil production in 1980. Cheyenne and Kimball counties also exceeded 1,000,000 barrels during 1980, while Hitchcock and Banner counties reported production totals over 500,000 barrels. After these top five, the production totals of other counties drop off quickly.

On a regional basis, the southern panhandle was the largest producing area in 1980, with a total of 3,446,438 barrels. Counties in this area include Banner, Cheyenne, Deuel, Garden, Kimball, Morrill, and Scotts Bluff. The other major producing area, which is in the southwestern part of the state (excluding Lincoln County), yielded 2,747,051 barrels in 1980. Richardson County is the only producing area in the eastern part of the state, and the level of activity is very slight in comparison to that in the panhandle and southwestern areas.

ROYALTY AND WORKING INTERESTS IN NEBRASKA OIL

Ownership of the oil and/or gas from a particular lease is divided among holders of working interests, royalty interests, and in some instances, overriding royalty interests. The working interest in a lease is held by the firm that undertakes the drilling, completion, and operation of the lease. More than one firm may be involved in the production activities of the leased property thereby creating a situation of multiple working interests. There may also be multiple holders of royalty interests. When a lease is first negotiated, the landowner (lessor) is usually given a one-eighth, or .125, royalty interest in the property's eventual production. The landowner is free to sell this interest to other parties, such as royalty brokers or even the firm(s) which holds the working interest in the leased property. On occasion, the royalty interest may be broken into several smaller percentages and distributed among family members. Settlements of the estates of landowners will also result in allocation of royalty interests to numerous individuals. In sum, the typical royalty interest in a leased property is dispersed among a number of parties and the current landowner need not have control of the largest portion of the interest.

(continued on page 6)

Figure 1
NEBRASKA COUNTIES WITH OIL PRODUCTION IN 1980

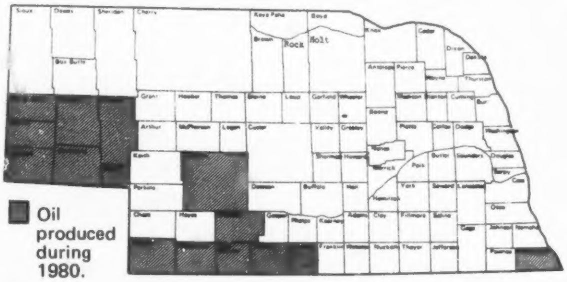


Table 4
ROYALTY AND WORKING INTERESTS IN NEBRASKA OIL
BY COUNTY AND RESIDENCE OF OWNER, 1978

	Royalty Interests				Working Interests	
County	Instate Landowner	Instate Non-Landowner	Outstate Landowner	Outstate Non-Landowner	Instate Firms	Outstate Firms
Banner	.02973	.05412	.00893	.06671	.16647	.67404
Cheyenne	.04043	.04629	.00767	.07241	.04657	.78663
Deuel	.08333	.04167	0	.02000	.85500	0
Dundy	.10755	.00891	.00378	.03924	.04551	.79501
Frontier	.01047	.08958	0	.04210	.05698	.80087
Harlan	.02054	.06129	0	.08002	.11580	.72235
Hitchcock	.04591	.05171	.00595	.03969	.04827	.80847
Kimball	.04149	.03846	.01345	.07543	.17735	.65382
Morrill	.06034	.04046	.00453	.05174	.06684	.77609
Red Willow	.04530	.03691	.00295	.03990	.05255	.82239
Scotts Bluff	.02542	.10044	.00045	.03527	.27202	.56640
Overall (State)	.04185	.04501	.00691	.05745	.09498	.75380

Source: Compiled by author.

Review and Outlook

The Nebraska economy recorded an increase in April, with the physical volume index of the nonagriculture sector increasing 1.7%. Once again, cash farm marketings for Nebraska and the United States were unavailable at the time of publication. Consequently, information regarding the agriculture sector is not included in this report.

Prices received by Nebraska farmers in April 1981 were 17% above those received in April 1980. Nationally, prices received were up 16.3% in April 1981 when compared with one-year previous, while prices paid were up 10.5% over the same interval. Prices received compare favorably in 1981 because of extremely low prices prevailing in April 1980.

Turning to the nonagriculture sector, all areas recorded an advance in April 1981 with the exception of construction. After increasing from the June 1980 trough, the construction index declined 6% in April 1981 from March's level. Output in the construction sector remains under pressure, but the April 1981 level was approximately 30% above the depressed April 1980 output level for this sector.

Manufacturing output recorded a 4.2% increase in April 1981 when compared with month-earlier levels. Although output from Nebraska's manufacturing sector was above year-previous levels by less than 1%, the April increase marks one of the best monthly gains in the manufacturing sector in more than three years.

The physical volume of output index (continued on page 5)

Notes for Tables 1 and 2: (1) The "distributive" indicator represents a composite of wholesale and retail trade; transportation, communication and utilities; finance, insurance, and real estate; and selected services. (2) The "physical volume" indicator and its components represent the dollar volume indicator and its components adjusted for price changes using appropriate price indexes—see Table 5, page 5.

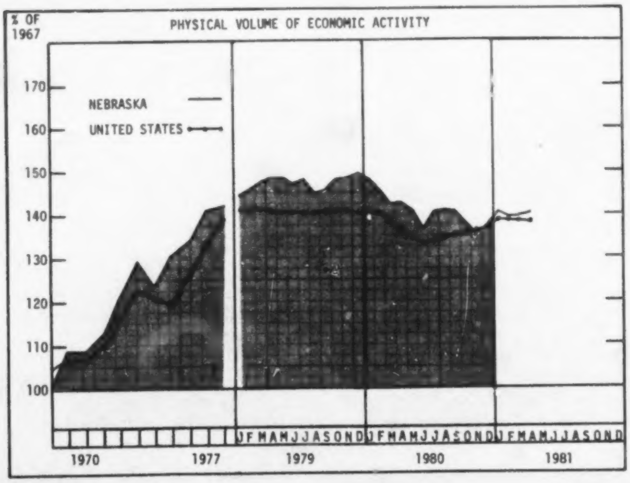
ECONOMIC INDICATORS: NEBRASKA AND UNITED STATES

1. CHANGE FROM PREVIOUS YEAR

April 1981	Current Month as Percent of Same Month Previous Year		1981 Year to Date as Percent of 1980 Year to Date	
Indicator	Nebraska	U.S.	Nebraska	U.S.
Dollar Volume	108.4	111.1	106.3	109.5
Agricultural	NA		NA	
Nonagricultural	110.4	111.4	107.7	109.7
Construction	144.9	108.3	130.4	104.2
Manufacturing	110.8	110.0	104.9	107.9
Distributive	109.8	112.8	107.8	111.4
Government	104.1	109.4	105.5	108.5
Physical Volume	97.9	100.4	96.5	99.1
Agricultural	NA		NA	
Nonagricultural	100.6	100.9	97.6	99.4
Construction	133.7	100.0	121.6	97.2
Manufacturing	100.6	99.2	95.2	97.5
Distributive	99.8	102.6	97.2	100.4
Government	97.5	98.5	98.5	99.8

2. CHANGE FROM 1967

Indicator	Percent of 1967 Average	
	Nebraska	U.S.
Dollar Volume	363.1	349.5
Agricultural	NA	NA
Nonagricultural	372.8	350.8
Construction	312.9	325.7
Manufacturing	394.3	317.6
Distributive	378.6	376.8
Government	359.7	329.4
Physical Volume	140.4	137.6
Agricultural	NA	NA
Nonagricultural	144.3	138.1
Construction	100.0	104.1
Manufacturing	169.3	133.0
Distributive	141.9	141.2
Government	144.3	150.1

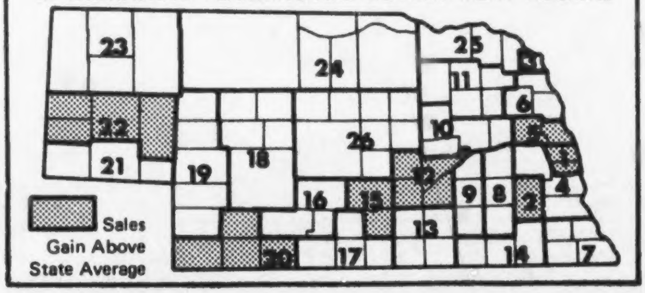


3. NET TAXABLE RETAIL SALES OF NEBRASKA REGIONS AND CITIES (Adjusted for Price Changes)

Region Number and City	City Sales*	Sales in Region*	
	April 1981 as percent of April 1980	April 1981 as percent of April 1980	Year to date'81 as percent of Year to date'80
The State	98.9	99.8	98.9
1 Omaha	100.6	102.2	102.2
Bellevue	105.4		
2 Lincoln	94.4	95.1	100.2
3 So. Sioux City	106.9	106.6	98.3
4 Nebraska City	89.8	95.0	96.3
5 Fremont	103.1	99.9	99.4
Blair	91.6		
6 West Point	92.5	95.5	91.5
7 Falls City	90.2	90.4	93.3
8 Seward	98.9	96.1	97.3
9 York	88.2	95.0	91.8
10 Columbus	107.9	106.6	95.5
11 Norfolk	108.0	109.5	97.3
Wayne	114.5		
12 Grand Island	103.5	106.7	102.6
13 Hastings	103.5	103.5	99.3
14 Beatrice	87.8	95.3	98.9
Fairbury	89.5		
15 Kearney	111.8	109.5	100.9
16 Lexington	99.6	91.9	93.7
17 Holdrege	113.8	105.9	98.0
18 North Platte	96.9	97.6	95.1
19 Ogallala	95.9	103.0	97.5
20 McCook	109.8	108.7	105.5
21 Sidney	91.8	93.0	99.3
Kimball	85.3		
22 Scottsbluff/Gering	100.8	103.2	99.7
23 Alliance	95.9	96.6	98.8
Chadron	87.4		
24 O'Neill	109.1	110.5	96.5
25 Hartington	116.6	102.6	91.2
26 Broken Bow	101.9	103.0	90.5

*State totals include sales not allocated to cities or regions. The year-to year ratios for city and region sales may be misleading because of changes in the portion of unallocated sales. Region totals include, and city totals exclude, motor vehicle sales. Sales are those on which sales taxes are collected by retailers located in the state. Compiled from data provided by Nebraska Department of Revenue.

1981 YEAR TO DATE AS PERCENT OF 1980 YEAR TO DATE IN NEBRASKA'S PLANNING AND DEVELOPMENT REGIONS



(continued from page 4)

for the distributive trade also recorded a sharp increase in April, moving 1.5% above the March 1981 level. The April 1981 reading for the distributive trade sector is approximately the equivalent of that recorded one year ago. Output from the distributive trade sector has moved erratically upward during the past three quarters.

The government sector recorded a 1% increase in output in April 1981. This index was approximately 2.5% below the April 1980 level.

Nebraska's employment picture improved in April when compared with March 1981 and April 1980. Employment in April 1981 was above the year-previous level by more than 1,000. While employment was up in the state in 1980, the number of persons in the labor force had declined by approximately 4,000 compared with year-previous levels, thereby preventing the unemployment rate from looking worse than it actually was. Unemployment, on the other hand, stood at 3.8% in April 1981 compared with 3.6% in April 1980.

Employment in the state's two largest markets remains slightly below year-previous levels. April 1981 employment in Omaha was estimated at 270,700, compared with 273,750 in April 1980. Unemployment was lower in April 1981 in Omaha when compared with one-year previous, but fewer people were in the labor market. Employment in Lincoln was virtually unchanged over the interval April 1980-April 1981, while unemployment was up 0.2% to 3.2%, April 1981.

Nebraska dollar-volume retail sales were up 8.9% April 1981 compared with April 1980. Total retail sales were $771 million in April compared with $708 million April 1980. Motor vehicle retail sales were up a strong 17.8% on an unadjusted basis over this interval, while nonmotor vehicle retail sales were up 7.9%.

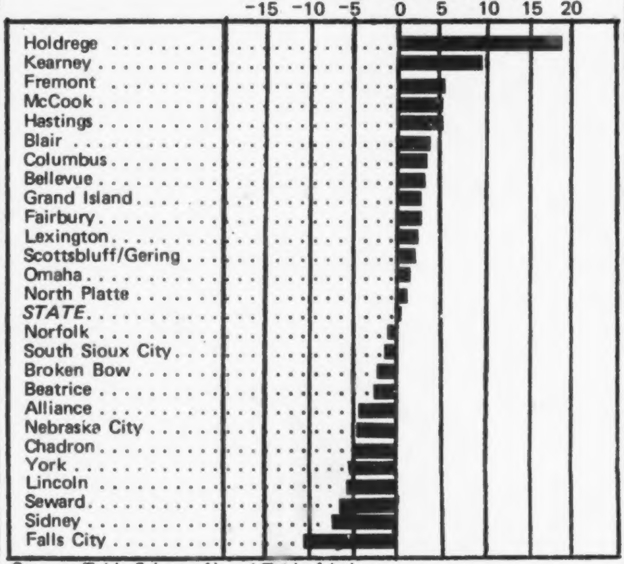
When adjustments are made for price changes, total retail sales in Nebraska were down 0.2%. The commodity component of the Consumer Price Index in April 1981 was 9.1% above year-previous levels. Using this component to deflate retail sales indicates that nonmotor vehicles were down 1.1%, while motor vehicle sales were up 7.9% in price-adjusted terms. The deflator, of course, is only an approximation of price changes.

Fourteen of the state's trade centers, noted in Table 4, recorded increases in activity April 1980 to April 1981. Substantial gains in city business indexes were recorded at Holdrege, 18.7%; Kearney, 9.4%; Fremont, 5.7%; and McCook and Hastings, 5.1%.

Some cities recorded notable sales gains April 1980 to April 1981. Hartington recorded a 16.6% increase in real retail sales, followed by a 14.5% increase at Wayne. Holdrege and Kearney had real increases in retail sales of 13.8% and 11.8%, respectively, and McCook recorded a 9.8% increase.

D. E. P.

CITY BUSINESS INDEXES
Percent Change April 1980 to April 1981



Source: Table 3 (page 4) and Table 4 below.

4. APRIL CITY BUSINESS INDICATORS

The State and Its Trading Centers	Percent of Same Month a Year Ago		
	Employment[1]	Building Activity[2]	Power Consumption[3]
The State	100.3	109.9	85.2
Alliance	98.8	64.1	85.8
Beatrice	99.9	168.5	76.7
Bellevue	99.4	133.5	100.3
Blair	101.9	403.9	93.9
Broken Bow	100.8	45.3	90.7
Chadron	99.2	121.2	78.3
Columbus	102.0	85.4	81.3
Fairbury	101.7	425.0	80.8
Falls City	101.0	25.3	86.1
Fremont	104.6	161.7	106.6*
Grand Island	101.1	123.8	91.9
Hastings	101.6	178.4	NA
Holdrege	101.3	1060.1	85.1
Kearney	101.3	118.4	89.3
Lexington	102.2	138.5	81.2
Lincoln	98.0	66.6	89.2
McCook	101.1	106.3	79.8
Nebraska City	100.6	88.6	75.4
Norfolk	100.2	41.6	91.9
North Platte	99.5	175.0	85.2
Omaha	99.4	134.1	84.3
Scottsbluff/Gering	101.4	120.6	67.0
Seward	100.6	29.5	80.4
Sidney	101.2	44.4	98.6
So. Sioux City	95.9	60.6	64.9
York	101.2	89.5	82.5

[1] As a proxy for city employment, total employment for the county in which a city is located is used.

[2] Building Activity is the value of building permits issued as spread over an appropriate time period of construction. The U.S. Department of Commerce Composite Construction Cost Index is used to adjust construction activity for price changes.

[3] Power Consumption is a combined index of consumption of electricity and natural gas except in cases marked * for which only one is used.

Source: Compilation by Bureau of Business Research from reports of private and public agencies.

5. PRICE INDEXES

April 1981	Index (1967 = 100)	Percent of Same Month Last Year	Year to Date as Percent of Same Period Last Year*
Consumer Prices	266.8	110.0	110.9
Commodity component	250.8	109.1	109.8
Wholesale Prices	292.8	111.4	110.9
Agricultural Prices			
United States	257.0	116.3	112.4
Nebraska	261.0	117.0	109.3

*Using arithmetic average of monthly indexes.

Sources: Consumer and Wholesale Prices: U.S. Bureau of Labor Statistics; Agricultural Prices: U.S. Department of Agriculture.

(continued from page 3)

An overriding royalty is a royalty interest in addition to the basic landowner royalty interest. An interest of this type may be generated from the sale of a lease by the lessee to a third party. For example, firm A leases a property and gives the landowner a .125 interest, the usual royalty interest at the date of the lease award. Firm A now holds the .875 working interest but decides not to undertake the task of exploration on the property. Instead, firm A sells the working interest to firm B but, as part of the payment, retains an interest of, say .05 in the eventual production of the property. This interest does not participate in any exploration and production expenses and thus is like a true royalty interest. Assuming that firm B successfully completes wells on the property, the breakdown of production interests would then be:

landowner:	.125 royalty interest
firm A:	.05 overriding royalty interest.
firm B:	.825 working interest

As in the case of the landowner royalty interests, overriding royalty interests may be traded and sold a number of times, further distributing the overall ownership of production from the property.

An extensive survey of royalty and working interests in oil-producing properties was conducted during the summer of 1979 by the author and research assistants of the Bureau of Business Research. Eleven of the fifteen counties in which oil was produced during 1978 were covered. The four counties excluded were Furnas, Garden, Lincoln, and Richardson, which together accounted for only .8 percent of state oil production in 1978. Property tax statements filed by operators in the county where production occurs provided the working and royalty interest breakdown in most cases. Information from these statements was tabulated for each county, and the current landowners of producing properties were determined from tax rolls maintained at county assessor offices. In this way, the name of the current landowner of a particular property could be checked against the list of royalty holders to see if he or she held a royalty interest. Addresses of interest holders were available in most cases, thereby making it possible to determine whether an interest was held by an instate or outstate party. Some operators did not report a detailed breakdown of interest holders on their property tax forms. These firms were contacted and asked to supply the information. After all the data had been processed, the interest breakdown for 94.4 percent of state production in 1978 had been determined.

Table 4 (p. 3) reports the breakdown of production among interest types for each of the eleven counties surveyed. To determine the aggregate interest of a specific type in a county, the total number of barrels attributable to that type of interest was divided by total barrels produced. This methodology was also applied to the overall production of the eleven counties. The resulting percentages (the last line in Table 4) can be regarded as a breakdown of the interests in total state production.

The figures of Table 4 are quite revealing. On average, instate landowners (including government) hold only a .04185 royalty interest in state oil production, a share that is substantially below the .125 interest usually given at the time of leasing. The factors noted above which contribute to dispersion of royalty interests certainly operate in Nebraska. Non-landowners hold the highest royalty interests in Nebraska oil, with .04501 going to residents and .05745 to nonresidents. The working interest figures reveal the dominance of outstate firms in controlling Nebraska's oil production. Nebraska operators hold a .09498 interest in total production, while outstate operators hold a .75380 interest. However, these figures may not reflect contractural agreements between outstate firms and Nebraska firms which result in a higher effective percentage for the latter. For example, an instate firm may contract with an outstate firm to drill and complete a well in consideration for a share of the working interest. An agreement of this type may not be reflected on the property tax statements which served as our data source.

More economic content can be given the interest breakdown by multiplying the respective percentages and the value of 1978 state production, $66.8 million, to give the gross earnings of the respective interests in that year. They are (in millions of dollars):

Instate landowners	$2.8	Outstate landowners	$0.5
Instate non-landowners	$3.0	Outstate non-landowners	$3.8
Instate firms	$6.3	Outstate firms	$50.4

The possible understatement of the interest share of instate firms should be kept in mind when examining these dollar amounts.

J. R. S.

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DEMOGRAPHIC AND ECONOMIC CHANGES FOR THE NORTHWEST REGION OF NEBRASKA

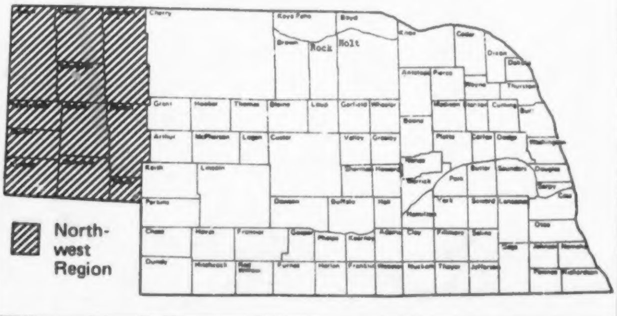
This is the first of a series of articles that will focus on one region of Nebraska in order to manifest the demographic and economic characteristics of that region. Selected for this first in-depth analysis is the Northwest Region, frequently referred to as the Panhandle. Statistics on population, personal income, and retail sales will be presented to define a scenario of change during the past decade. Regional changes will be compared to those that have occurred statewide.

When traveling westward across Nebraska on Interstate 80, one cannot help but notice the transition that occurs in the surrounding landscape shortly after leaving Ogallala. The relatively flat farmlands suddenly give way to the high plains of the Nebraska Panhandle. As it is with the land, contrasts between the Northwest Region and other regions of the state are well defined in terms of demographic and economic characteristics. This article will seek to highlight the traits of this unique region of Nebraska comprising the counties of Banner, Box Butte, Cheyenne, Dawes, Deuel, Garden, Kimball, Morrill, Scotts Bluff, Sheridan, and Sioux (Figure 1).

POPULATION

During the decade of the 1970s, fifty-one counties in Nebraska experienced declines in population. This trend also held for the Northwest Region, as seven of the eleven counties diminished in population during this ten-year period (Table 1). Counties in the region showing a population increase were Box Butte, Morrill, Scotts Bluff, and Sheridan. The most significant increase in population was experienced by Box Butte County, where the number of inhabitants increased 35.7 percent during the past decade. In fact, this was the largest percentage gain of any county in Nebraska. The populations of Morrill, Scotts Bluff, and Sheridan counties increased modestly during the 1970s, although percentage increases were below the statewide increase of 5.7 percent.

Figure 1
NORTHWEST REGION OF NEBRASKA



Kimball County registered an 18.8 percent decline in population during the past decade, which is also the largest percentage decline in population of any county in the state. The remaining counties in the Northwest Region experienced more moderate declines in population, ranging from a 1.6 percent decrease for Dawes County to a 9.4 percent loss for Deuel County.

Of the cities in the Northwest Region, Alliance registered the greatest increase in population, growing from 6,862 in 1970 to 9,869 in 1980 (Table 1). Chadron's population remained essentially unchanged, while the cities of Kimball, Sidney, and Scottsbluff experienced losses in population. The population of Kimball fell from 3,680 in 1970 to 3,120 in 1980, a 15.2 percent decline.

Collectively, the population of counties in the Northwest Region increased 3.5 percent during the 1970s, as compared to the statewide increase of 5.7 percent. It is anticipated that the population of the Northwest Region will increase approximately 4 percent during the present decade.

(continued on page 2)

Table 1
1970 AND 1980 POPULATION OF COUNTIES
AND SELECTED CITIES IN THE
NORTHWEST REGION OF NEBRASKA

	Population	
Counties	1970	1980
Banner	1,034	918
Box Butte	10,094	13,696
Cheyenne	10,778	10,057
Dawes	9,761	9,609
Deuel	2,717	2,462
Garden	2,929	2,808
Kimball	6,009	4,882
Morrill	5,813	6,085
Scotts Bluff	36,432	38,344
Sheridan	7,285	7,544
Sioux	2,034	1,845
	Population	
Cities	1970	1980
Alliance	6,862	9,869
Chadron	5,921	5,933
Kimball	3,680	3,120
Sidney	6,403	6,010
Scottsbluff	14,507	14,156

Source: 1970 U.S. Census of Population and 1980 U.S. Census of Population.

(continued from page 1) This gain could be significantly greater, however, if energy-related activities increase in the region.

PERSONAL INCOME

A commonly used measure of the economic well-being of a region is personal income, composed of wages and salaries, proprietors income, other labor income, dividends, interest, rent, and transfer payments. The best available data on county-level personal income are annual in nature and cover the time period from 1972 through 1979.

Total personal income for the Northwest Region of Nebraska increased from $384.2 million in 1972 to $722.5 million in 1979, an 88 percent increase (Table 2). This regional increase is smaller than the statewide increase of 97 percent, primarily due to the farm income component of personal income which declined significantly for the Northwest Region in 1979 while increasing at the state level. The average annual increase in personal income for both the Northwest Region and the state was 10 percent for the period.

Box Butte and Scotts Bluff counties experienced increases in personal income of 113 percent and 104 percent, respectively. Most of the other counties in the region registered gains in personal income below the statewide increase. Because farm income is the major component of personal income for Banner and Sioux counties, their income series behaved rather erratically over the eight-year time period.

Nonfarm participation income is that part of total personal income consisting of wages and salaries, proprietors income, and other labor income (fringe benefits, and the like). In essence, it represents the earnings of all individuals that are producing the goods and services of a region. Corrected for inflation, real nonfarm earnings are expressed in 1972 dollars and yield an indication of the trend in output and production for a region. Real nonfarm income for the Northwest Region increased 26 percent from 1972 through 1979, the same as the statewide increase. Figures 2 and 3 illustrate the growth trends of real nonfarm earnings for the Northwest Region and the state, respectively. In both instances, the annual growth rate is 3 percent. It is interesting to note that the Northwest Region felt the impact of the disastrous 1974-75 recession to a greater extent than the state as a whole. Whereas the state economy experienced a slowdown in the growth of real nonfarm income, the Northwest Region of Nebraska registered a decline in this important component of personal income. Recovery from the effects of the recession was dramatic, however, with the Northwest Region posting an 8 percent increase in real nonfarm earnings the following year, as compared to a

Figure 2

NONFARM PARTICIPATION INCOME
FOR THE NORTHWEST REGION OF NEBRASKA
(in 1972 dollars)

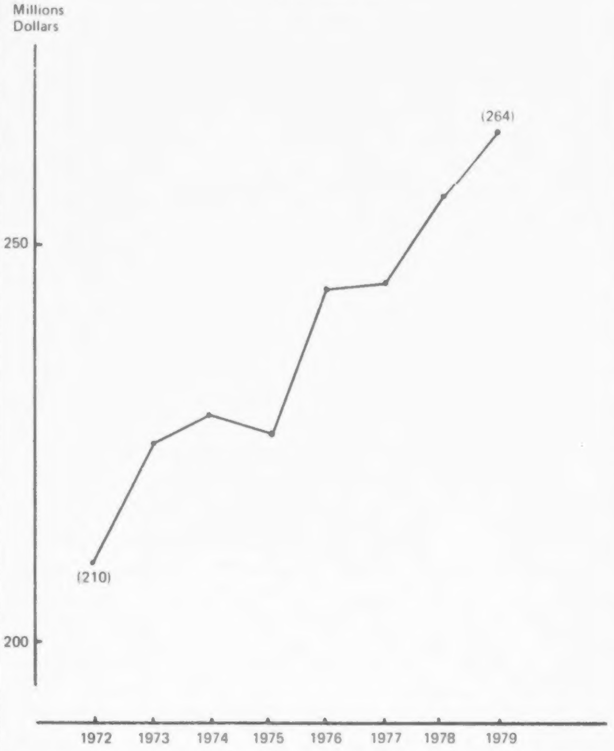


Table 2

PERSONAL INCOME FOR COUNTIES OF THE NORTHWEST REGION OF NEBRASKA
(in thousands of current dollars)

	1972	1973	1974	1975	1976	1977	1978	1979
Banner	5,991	7,977	5,248	6,453	5,441	4,416	8,111	5,154
Box Butte	43,310	56,231	53,197	65,608	65,128	70,738	82,995	92,308
Cheyenne	44,457	49,991	50,249	65,999	60,918	61,289	79,065	78,543
Dawes	33,984	39,172	45,115	37,750	44,914	50,308	55,615	62,732
Deuel	15,103	18,259	16,793	23,264	20,497	20,375	22,141	23,043
Garden	13,195	16,268	13,383	18,252	15,038	15,651	20,664	21,424
Kimball	26,402	32,256	33,436	37,034	36,528	35,948	47,164	44,325
Morrill	20,885	29,985	25,777	31,539	29,448	30,925	33,320	39,755
Scotts Bluff	142,826	167,088	195,248	232,074	221,718	232,714	268,281	290,752
Sheridan	31,035	38,299	32,371	33,983	37,936	41,577	48,200	54,964
Sioux	6,968	8,567	6,668	8,733	6,870	5,062	7,042	9,514
Regional Total	384,156	464,093	477,485	560,689	544,436	569,003	672,598	722,514

Source: Bureau of Economic Analysis, U.S. Department of Commerce.

7 percent increase statewide. From 1976 to 1977, the growth of nonfarm income was flat for the Northwest Region, but increased more than 2 percent at the state level. This was due to a significant decline in farm income for this region, and emphasizes the impact that agriculture has on the nonagricultural sector.

Per capita personal income is total personal income divided by population, and is frequently used to measure the economic well-being of individuals in a region. The concept is strictly monetary, however, and doesn't take into account other benefits that people enjoy from living in a certain region. Being a ratio, per capita personal income is sensitive to changes in the numerator and denominator, and should be examined over the long run. Per capita personal income (1972 dollars) for the Northwest Region has increased from $4,135 in 1972 to $4,604 in 1979, representing an annual growth rate of 1.5 percent. Statewide, per capita personal income increased from $4,364 in 1972 to $5,108 in 1979, representing an annual growth rate of 2.3 percent. Figure 4 illustrates the behavior of real per capita personal income for the Northwest Region and for the entire state. With the exception of one year (1975), real per capita personal income for the Northwest Region has lagged behind that of the entire state. It should also be noted that the rather sizable fluctuations in both graphs of Figure 4 correspond to the good years and the lean years in terms of farm income. This again verifies the significant influence of agriculture on the Nebraska economy.

RETAIL SALES

The final barometer of economic well-being to be described is net taxable retail sales. A high positive correlation exists between the relative wealth of a region and the level of retail sales. Stated otherwise, when a region has a higher level of personal income than surrounding regions, the volume of retailing will usually reflect this favorable condition. As in the previous sections, the following discourse will compare changes in the levels of retail sales for the Northwest Region with those of the entire state. Retail sales will be adjusted for inflation and expressed in 1972 dollars for the purpose of this comparison.

Net taxable retail sales for counties and selected cities of the Northwest Region and for the entire state are presented in Table 3 (p. 6). In real terms (1972 dollars), retail sales for the region have increased from $193.0 million in 1970 to $273.4 million in 1980, a 42 percent increase at an annual growth rate of 3.5 percent. Statewide, the overall 1970 to 1980 increase in retail sales was 56 percent, representing an annual growth rate of 4.5 percent. It is no secret that retail sales for the Northwest Region have lagged behind the rest of the state. As indicated in the previous section, real per capita personal income has historically been below the statewide level. However, certain trends appear to be changing, as indicated in recent quarterly retail sales reports published by the Bureau of Business Research. For instance, net taxable retail sales for the first

(continued on page 6)

Figure 3
NONFARM PARTICIPATION INCOME
FOR NEBRASKA
(in 1972 dollars)

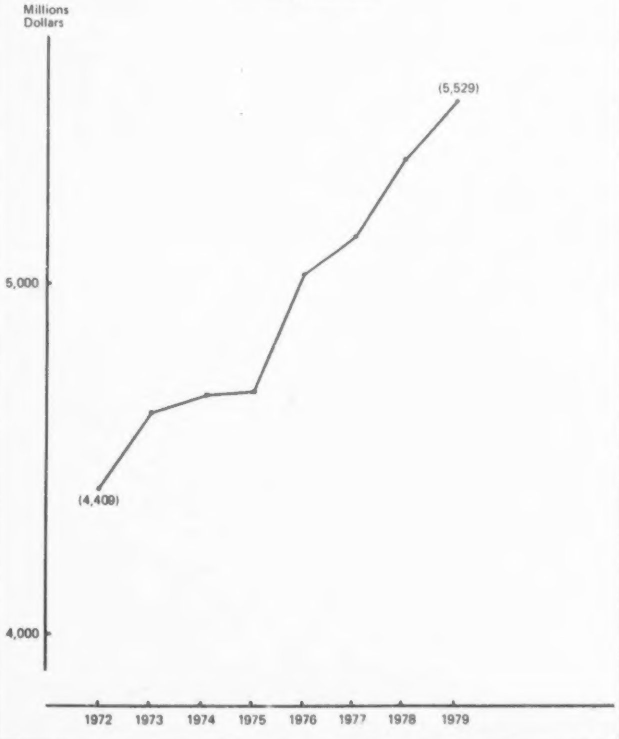
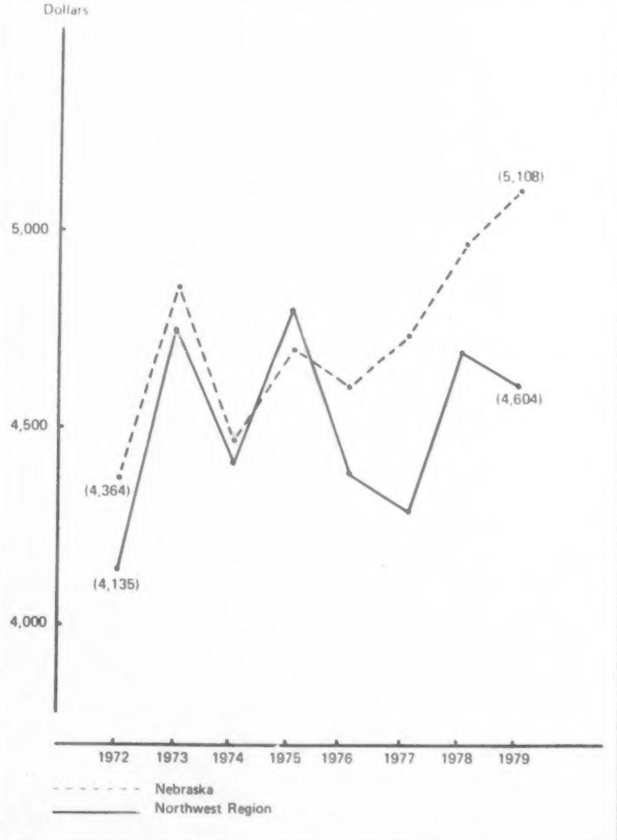


Figure 4
PER CAPITA PERSONAL INCOME
IN THE NORTHWEST REGION OF NEBRASKA
AND THE STATE
(in 1972 dollars)



Review and Outlook

The level of economic activity in Nebraska increased slightly in May 1981 even though four of the five sectors recorded losses when compared to April. The physical volume index for the state rose 0.2 percent from its April level, but was 3.3 percent below its value of last year. Comparable national figures indicate an opposite pattern. The index for May was down 0.3 percent from April, but was 1.5 percent above the level of May 1980.

The April-to-May increase in Nebraska's economic activity was concentrated in the agricultural sector, where activity rose 29.0 percent. In sharp contrast, nonagricultural output fell 2.9 percent, with all four sectors declining. The month-to-month losses in the nonagricultural sectors were: government, -0.2 percent; manufacturing, -2.0 percent; distributive, -2.1 percent; and construction, -4.8 percent.

The sizable month-to-month increase in agricultural output (as measured by seasonally adjusted and price-adjusted cash farm marketings) should be viewed with caution. Not only is this sector extremely volatile, but the May increase also followed two successive monthly losses of 12.0 percent and 37.0 percent. Agricultural output for May, therefore, was nearly 30 percent below the level of a year ago. Seasonally adjusted prices received by Nebraska farmers declined 1.1 percent from April, but remained 14.6 percent higher than prices of May 1980.

Construction activity dropped for the second consecutive month in May. Because of the gains (continued on page 5)

Notes for Tables 1 and 2: (1) The "distributive" indicator represents a composite of wholesale and retail trade; transportation, communication and utilities; finance, insurance, and real estate; and selected services. (2) The "physical volume" indicator and its components represent the dollar volume indicator and its components adjusted for price changes using appropriate price indexes—see Table 5, page 5.

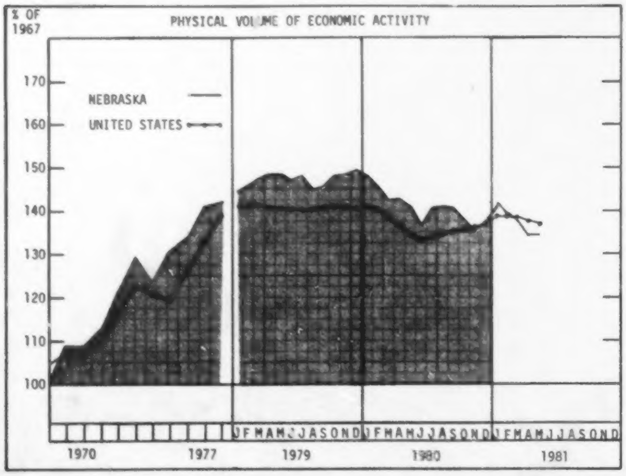
ECONOMIC INDICATORS: NEBRASKA AND UNITED STATES

1. CHANGE FROM PREVIOUS YEAR

May 1981	Current Month as Percent of Same Month Previous Year		1981 Year to Date as Percent of 1982 Year to Date	
Indicator	Nebraska	U.S.	Nebraska	U.S.
Dollar Volume	106.5	111.9	106.4	110.0
Agricultural	81.1	104.9	93.2	104.0
Nonagricultural	109.7	112.1	108.1	110.2
Construction	150.8	107.1	133.9	104.4
Manufacturing	111.3	112.3	106.1	108.8
Distributive	108.3	113.2	107.9	111.8
Government	104.2	108.9	105.3	108.7
Physical Volume	96.7	101.5	96.6	99.6
Agricultural	70.7	91.6	84.5	92.1
Nonagricultural	100.2	101.9	98.1	99.9
Construction	141.2	100.3	124.9	97.5
Manufacturing	101.2	101.4	96.3	98.2
Distributive	98.6	103.1	97.4	101.0
Government	97.8	98.8	98.4	99.6

2. CHANGE FROM 1967

Indicator	Percent of 1967 Average	
	Nebraska	U.S.
Dollar Volume	349.5	350.3
Agricultural	227.7	324.4
Nonagricultural	367.8	351.2
Construction	299.9	316.0
Manufacturing	386.2	316.7
Distributive	373.8	378.5
Government	360.8	331.2
Physical Volume	134.5	137.0
Agricultural	88.2	128.2
Nonagricultural	141.5	137.3
Construction	95.2	100.3
Manufacturing	165.5	132.1
Distributive	139.0	140.7
Government	144.1	149.5

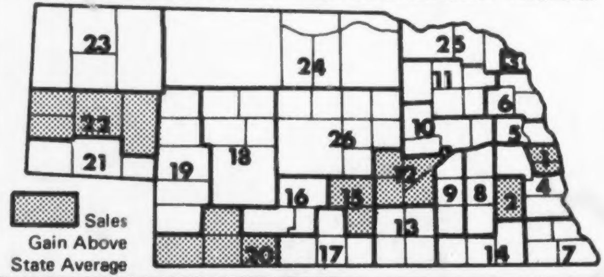


3. NET TAXABLE RETAIL SALES OF NEBRASKA REGIONS AND CITIES (Adjusted for Price Changes)

Region Number and City	City Sales*	Sales in Region*	
	May 1981 as percent of May 1980	May 1981 as percent of May 1980	Year to date'81 as percent of Year to date'80
The State	100.2	100.7	99.2
1 Omaha	109.1	108.9	103.7
Bellevue	104.1		
2 Lincoln	104.1	104.0	100.9
3 So. Sioux City	97.8	88.6	96.1
4 Nebraska City	96.7	97.7	96.6
5 Fremont	104.9	102.0	99.9
Blair	100.0		
6 West Point	92.2	96.7	92.5
7 Falls City	105.3	101.2	94.9
8 Seward	114.9	102.9	98.4
9 York	97.1	97.8	93.0
10 Columbus	107.0	105.7	97.4
11 Norfolk	102.0	105.7	99.0
Wayne	107.9		
12 Grand Island	108.6	98.8	101.8
13 Hastings	98.3	93.6	98.1
14 Beatrice	98.8	96.4	98.4
Fairbury	87.3		
15 Kearney	103.3	102.7	101.3
16 Lexington	89.5	87.5	92.4
17 Holdrege	97.1	93.6	97.1
18 North Platte	92.8	90.5	94.1
19 Ogallala	89.2	99.8	97.9
20 McCook	94.8	100.6	104.4
21 Sidney	93.2	94.2	98.2
Kimball	92.8		
22 Scottsbluff/Gering	110.2	107.9	101.4
23 Alliance	99.7	97.5	98.5
Chadron	96.3		
24 O'Neill	93.6	104.0	98.1
25 Hartington	100.9	97.3	92.4
26 Broken Bow	104.3	94.6	91.4

*State totals include sales not allocated to cities or regions. The year-to year ratios for city and region sales may be misleading because of changes in the portion of unallocated sales. Region totals include, and city totals exclude, motor vehicle sales. Sales are those on which sales taxes are collected by retailers located in the state. Compiled from data provided by Nebraska Department of Revenue.

1981 YEAR TO DATE AS PERCENT OF 1980 YEAR TO DATE IN NEBRASKA'S PLANNING AND DEVELOPMENT REGIONS



(continued from page 4)

in seven of the previous eight months, however, this month's activity was still 41.2 percent above the dismal levels of last May.

Manufacturing was the only other sector recording a May-to-May gain. The 1.2 percent increase represents only the second year-to-year gain for this sector since April 1980. Since the previous gain was last month, this may be an indication of renewed strength in the manufacturing sector.

The two remaining sectors, distributive and government, both recorded losses compared to May 1980. The losses were 1.4 percent in the distributive sector and 2.2 percent for government. These two sectors have been the weakest sectors in the Nebraska economy for several months. In fact, government has not recorded a year-to-year increase since May of 1980, and the distributive sector has not recorded a year-to-year increase since January 1980.

May employment data show a decrease of 0.4 percent (3,300 persons) compared to May 1980. At the same time, unemployment accounted for 3.6 percent of the labor force. Despite the decline for the state as a whole, Nebraska's cities showed some improvement. The twenty-six cities included in Table 4 increased an average of 0.1 percent. Sixteen of these cities experienced an increase in employment.

Net taxable retail sales recorded gains in May. The dollar volume of sales was up 9.6 percent above the sales of May 1980. After adjusting for the 8.9 percent May-to-May increase in prices, as measured by the commodity component of the Consumer Price Index, May sales gained 0.7 percent. Much of this gain was due to a 5.8 percent increase in motor vehicle sales, but nonmotor vehicle sales also grew, at a rate of 0.2 percent. Nationally, price-adjusted retail sales were up 3.8 percent from last May.

This strength in sales was reflected statewide, as eleven of the state's twenty-six planning regions recorded increases in total sales compared to May 1980. In addition, fourteen of the cities in Table 3 had nonmotor vehicle sales above those of last May. Two cities recorded increases greater than 10 percent: Seward's increase was 14.9 percent, and Scottsbluff/Gering recorded a 10.2 percent gain. Other cities with notable gains in real sales were Omaha, 9.1 percent; Grand Island, 8.6 percent; Wayne, 7.9 percent; Columbus, 7.0 percent; and Falls City, 5.3 percent.

Relative to May 1980, the city business indexes grew an average of 0.8 percent, as fourteen of the twenty-six cities registered gains. As a result of its sharp increase in building activity, Holdrege posted the largest gain in activity, with an increase of 12.6 percent. Other cities with May-to-May increases of more than 5 percent were Fremont, 8.5 percent; Fairbury, 6.5 percent; Scottsbluff/Gering, 6.0 percent; Grand Island, 5.5 percent; and Omaha and Blair, 5.3 percent.

J. A. D.

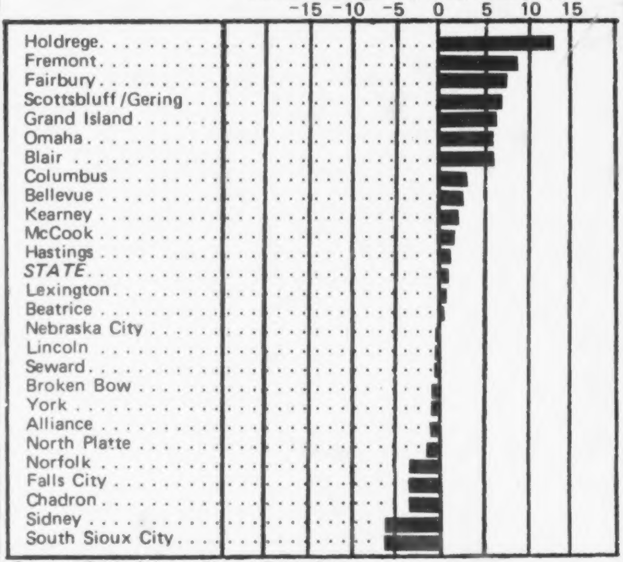
5. PRICE INDEXES

May 1981	Index (1967 = 100)	Percent of Same Month Last Year	Year to Date as Percent of Same Period Last Year*
Consumer Prices	269.0	109.8	110.7
Commodity component	251.9	108.9	109.6
Wholesale Prices	293.7	111.2	111.0
Agricultural Prices			
United States	253.0	114.5	112.8
Nebraska	258.0	114.7	110.3

*Using arithmetic average of monthly indexes.

Sources: Consumer and Wholesale Prices: U.S. Bureau of Labor Statistics; Agricultural Prices: U.S. Department of Agriculture.

CITY BUSINESS INDEXES
Percent Change May 1980 to May 1981



Source: Table 3 (page 4) and Table 4 below.

4. MAY CITY BUSINESS INDICATORS

The State and Its Trading Centers	Percent of Same Month a Year Ago		
	Employment[1]	Building Activity[2]	Power Consumption[3]
The State	100.1	114.5	99.3
Alliance	97.1	97.5	99.2
Beatrice	99.3	133.3	102.0
Bellevue	100.0	117.9	91.4
Blair	101.4	262.1	84.8
Broken Bow	100.4	51.6	97.3
Chadron	96.5	96.0	100.7
Columbus	101.5	84.1	100.4
Fairbury	100.8	1160.5	107.0
Falls City	100.1	30.2	107.7
Fremont	104.5	243.6	100.2*
Grand Island	100.9	129.3	93.0
Hastings	100.9	137.5	100.0
Holdrege	101.2	1584.4	163.6
Kearney	100.3	101.5	105.4
Lexington	101.8	256.3	91.0
Lincoln	98.6	71.2	105.3
McCook	100.9	194.1	93.4
Nebraska City	99.6	137.0	84.9
Norfolk	99.3	44.1	110.6
North Platte	98.9	144.6	90.3
Omaha	100.0	131.0	101.6
Scottsbluff/Gering	101.2	121.5	83.5
Seward	100.1	22.5	96.2
Sidney	100.9	51.1	100.8
So. Sioux City	96.1	51.8	80.6
York	100.6	95.9	46.6

[1] As a proxy for city employment, total employment for the county in which a city is located is used.

[2] Building Activity is the value of building permits issued as spread over an appropriate time period of construction. The U.S. Department of Commerce Composite Construction Cost Index is used to adjust construction activity for price changes.

[3] Power Consumption is a combined index of consumption of electricity and natural gas except in cases marked * for which only one is used.

Source: Compilation by Bureau of Business Research from reports of private and public agencies.

(continued from page 3)

quarter of 1981 compared to the first quarter of 1980 were above the average state gain in seven of the eleven counties of the Northwest Region. This same pattern emerged during the second and third quarters of 1980.

An interesting concept that can be applied to individual trade centers is real per capita retail sales. As with personal income, retail sales divided by population yields this value. Under certain assumptions, real per capita retail sales can be used as a crude measure of the drawing power of a trade center on consumers located away from that center. Real per capita retail sales for selected trade centers of the Northwest Region are given in Table 4.

Table 3
1970 AND 1980 NET TAXABLE RETAIL SALES*
FOR COUNTIES AND SELECTED CITIES OF THE
NORTHWEST REGION OF NEBRASKA AND THE STATE
(in millions of dollars)

	Current Dollars		1972 Dollars	
Counties	1970	1980	1970	1980
Banner	0.1	0.2	0.1	0.1
Box Butte	20.0	67.2	21.6	37.6
Cheyenne	19.4	42.9	21.0	24.0
Dawes	16.0	41.8	17.3	23.4
Deuel	4.4	8.7	4.8	4.9
Garden	3.8	8.6	4.1	4.8
Kimball	13.4	35.4	14.5	19.8
Morrill	8.9	27.1	9.6	13.1
Scotts Bluff	77.0	215.1	83.2	120.2
Sheridan	14.8	40.1	16.0	22.4
Sioux	0.7	1.9	0.8	1.1
Regional Total	178.5	489.0	193.0	273.4
State	2,961.5	8,920.7	3,205.5	4,986.4

	Current Dollars		1972 Dollars	
Cities	1970	1980	1970	1980
Alliance	18.6	63.8	20.1	35.7
Chadron	13.3	35.6	14.4	19.9
Kimball	13.0	34.6	14.1	19.3
Sidney	17.5	38.9	18.9	21.7
Scottsbluff	58.6	157.8	63.4	88.2

*Non-motor vehicle sales.
Source: Nebraska Department of Revenue.

In 1980, retail sales (1972 dollars) were $19.3 million for Kimball and $19.9 million for Chadron. However, real per capita retail sales for Kimball and Chadron were $6,199 and $3,354, respectively. Assuming that the propensity to consume and the costs of goods and services at both trade centers are approximately equal, the greater per capita sales figure for Kimball suggests that perhaps this trade center is attracting a relatively higher percentage of consumers from outside its boundaries. On the other hand, per capita personal income for Kimball County (Kimball) has been historically higher than for Dawes County (Chadron), and this could be the predominant factor influencing the levels of per capita sales at these trade centers. Without a great deal of study, it would be inappropriate to state that one trade center has significantly greater attraction than any other.

In summary, the Northwest Region of Nebraska appears to have been somewhat less affluent than the remainder of the state during the past decade. As stated previously, it is difficult to measure the well-being of individuals in a region based solely on monetary measures. This should be kept foremost in mind when reviewing the data contained herein. C. L. B.

Table 4
1970 AND 1980 PER CAPITA RETAIL SALES*
FOR SELECTED CITIES IN THE
NORTHWEST REGION OF NEBRASKA
(in 1972 dollars)

City	1970	1980
Alliance	2,931	3,614
Chadron	2,428	3,354
Kimball	3,819	6,199
Sidney	2,955	3,618
Scottsbluff	4,366	6,231

*Non-motor vehicle sales.
Source: Nebraska Department of Revenue, 1970 U.S. Census of Population, and 1980 U.S. Census of Population.

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NEBRASKA'S CHANGING AGE STRUCTURE

As of September 1981, the U.S. Bureau of the Census listed Nebraska's 1980 census count at 1,569,825 persons.[1] This count results in a percentage growth in population of 5.7 from 1970 to 1980. This compares with an 11.4 percent growth rate for the nation as a whole. An examination of the 1980 population by age reveals, however, that the growth in Nebraska's population did not occur evenly among age groups. Moreover, the pattern of growth differed from that for the United States as a whole. (See Table 1.)

POPULATION BY AGE[2]

One of the most significant aspects of the changes in the age structure for Nebraska is that the population is getting older. In 1980 the median age for Nebraskans was 29.7 years. This means that nearly half of the population was thirty or older in 1980. The 1980 median age represented an increase of 1.1 years from the 28.6 figure recorded in 1970. This increase also was the first in several decades. In 1950 the state's median age was 31.0 years; it fell to 30.2 years in 1960 before reaching a low in 1970.

Nationally, a similar pattern can be observed. The median ages for the past four censuses were: 1950, 30.2 years; 1960, 29.5 years; 1970, 28.0 years; and 1980, 30.0 years. It is interesting to note that for the first time in several decades the median age for the United States surpassed that of Nebraska in 1980.

In 1980 the largest five-year age group was composed of persons who were in their early twenties. This group accounted for 9.5 percent of the state's population. When combined with the 25 to 29 age group, the cohort[3] of twenty-year-olds comprised 18.1 percent of the population. These persons, born during the decade of the 1950s, are generally called the baby boom cohort. Although the baby boom lasted from 1947 to 1964,[4] it is more convenient to use the decade of

(continued on page 3)

Table 1
NEBRASKA AND UNITED STATES POPULATION BY AGE
1970 AND 1980

	Nebraska			United States		
	1970	1980	Percent Change 1970-1980	1970 (thousands)	1980 (thousands)	Percent Change 1970-1980
Total Population	1,485,333	1,570,006	5.7	203,235	226,505	11.4
Under 5	120,482	122,927	2.0	17,167	16,344	-4.8
5 to 9	147,622	118,039	-20.0	19,969	16,697	-16.4
10 to 14	153,355	120,983	-21.1	20,804	18,241	-12.3
15 to 19	143,442	147,308	2.7	19,084	21,162	10.9
20 to 24	114,943	148,823	29.5	16,383	21,313	30.1
25 to 29	89,262	134,788	51.0	13,486	19,518	44.7
30 to 34	78,149	114,446	46.4	11,437	17,558	53.5
35 to 39	77,998	88,446	13.4	11,113	13,963	25.6
40 to 44	81,458	75,361	-7.5	11,988	11,668	-2.7
45 to 49	81,122	73,814	-9.0	12,124	11,088	-8.5
50 to 54	76,040	76,834	1.0	11,111	11,709	5.4
55 to 59	71,837	75,143	4.6	9,979	11,614	16.4
60 to 64	66,917	67,518	0.9	8,623	10,086	17.0
65 to 69	56,386	61,482	9.0	6,996	8,781	25.5
70 to 74	48,843	52,534	7.6	5,447	6,797	24.8
75 and over	77,477	91,560	18.2	7,530	9,967	32.4
Median Age	28.6	29.7		28.0	30.0	

Source: U.S. Bureau of the Census, *Age, Sex, Race, and Spanish Origin of the Population by Regions, Divisions, and States: 1980.*

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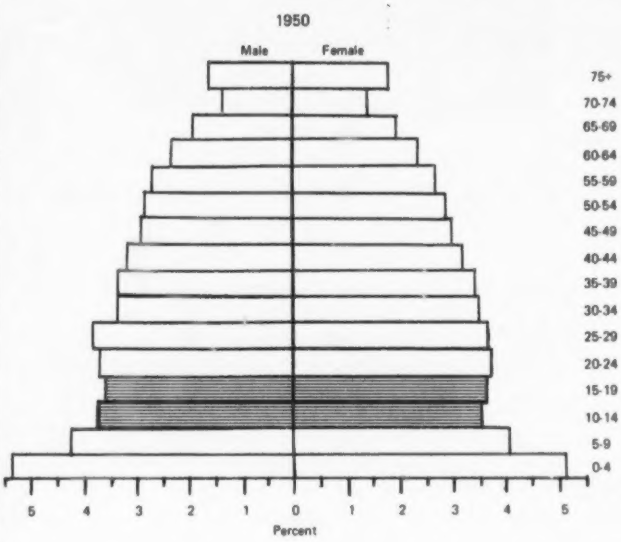
[1] The state's population count was previously listed as 1,570,006. The change is due to errors that were corrected for several areas in the state.

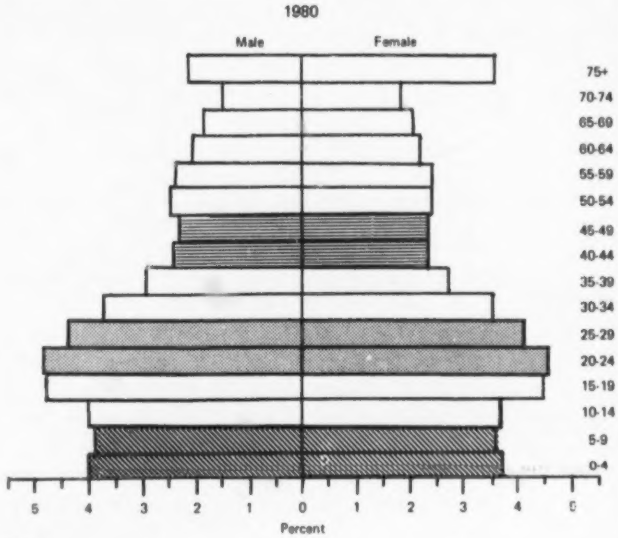
[2] The revision mentioned previously was made after the age breakdowns were released. Succeeding reports by the Census Bureau will contain the revised counts.

[3] A cohort consists of those persons born during a specified period of time.

[4] Leon F. Bouvier, "America's Baby Boom Generation: The Fateful Bulge," *Population Bulletin* 35, No. 1, April 1980, p. 7.

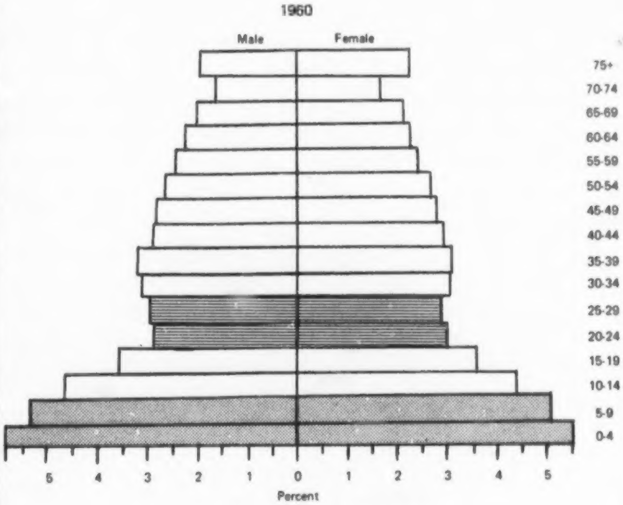
Figure 1
DISTRIBUTION OF NEBRASKA'S POPULATION BY AGE AND SEX





▤ Depression cohort.
▨ Baby boom cohort.
▧ Baby bust cohort.

Source: U.S. Bureau of the Census.



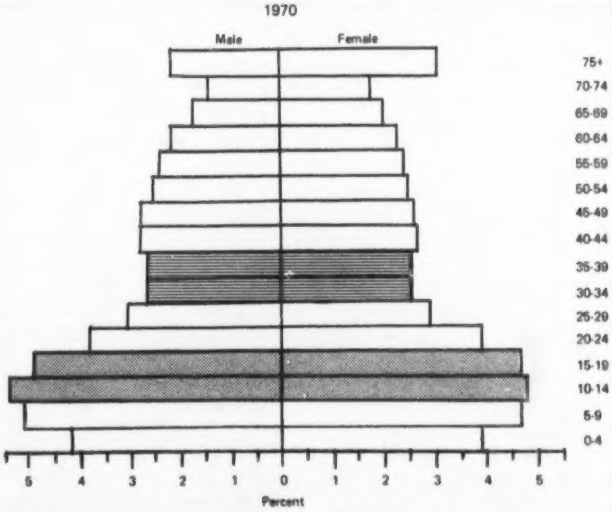
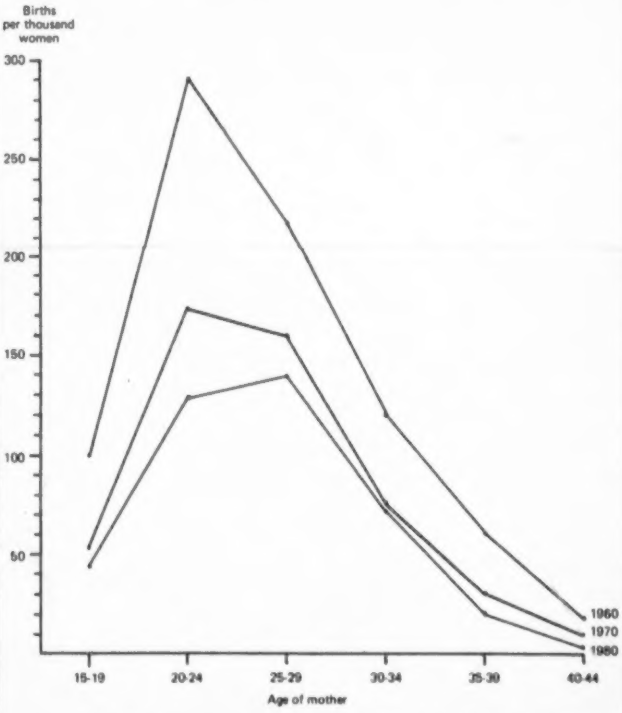


Figure 2
AGE-SPECIFIC BIRTH RATE FOR NEBRASKA, 1960, 1970, 1980



Source: Nebraska Bureau of Vital Statistics, *Statistical Report, 1980.*

(continued from page 1)

the 1950s when referring to the baby boom. If allowance was made for the spillover before and after the decade by adding persons in their late teens and early thirties, however, the twenty-year span would contain 34.7 percent of the population in the state in the 1980s. In other words, more than one-third of all persons who were living in Nebraska at the time of the 1980 census were born between 1945 and 1964.

Not surprisingly, the largest age groups were also the fastest growing. The 25 to 29-year-old age group grew by 51.0 percent; the 30 to 34-year-old age group grew by 45.4 percent; and the 20 to 24-year-old age group grew by 29.5 percent. The aging of the baby boom population will continue to cause relatively rapid expansion of the number of persons in successively older age categories and contraction in the size of age categories the baby boom population outgrows.

Other age groups which grew faster than the state average were those over 65, with the number of persons 75 and over increasing at a rate of 18.2 percent. The 65 to 69 bracket increased by 9.0 percent, and the 70 to 74 bracket increased by 7.6 percent. As Figure 1 (p. 2) shows, this trend has occurred for the past several decades. When added together, the age groups 65 and over account for 13.1 percent of all Nebraskans, an increase from the 12.3 percent recorded in 1970.

The age groups which contained middle-aged Nebraskans (the categories between 40 and 64) declined during the 1970s. There were 7.5 percent fewer 40 to 44-year-olds and 9.0 percent fewer 45 to 49-year-olds. These were persons born during the Depression, a period of understandably low birth rates. The remaining groups exhibited some growth, but the growth was less than the state average.

Young persons under the age of fifteen comprise a declining share of the total population of the state, having fallen from 38 percent of the total in 1970 to 32 percent in 1980. Not only have all the five-year age groups under fifteen lost in relative terms, the 5 to 9 age group and the 10 to 14 age group also declined in absolute terms. In 1980 there were 20.0 percent fewer 5 to 9-year-olds and 21.1 percent fewer 10 to 14-year-olds than there were in 1970. Part of the reason for this decline results from the movement of the baby boom population out of these age groups, but an additional reason can be found in the declining birth rates during the late 1960s and early 1970s.

The national age structure was quite similar to that of Nebraska. The rates of change for the various age groups may have differed somewhat, but overall the pattern compared closely. There were, however, several exceptions. The number of persons aged 60 and over grew much faster for the United States than for Nebraska. As the comparison of median ages indicated, Nebraska has generally had an older population than the nation. This characteristic changed in 1980, with much of the change occurring in the older age groups. In 1970, 16.8 percent of Nebraska's population was 60 and over, while the comparable figure for the nation was 14.1 percent. The state continued to have relatively more older persons in 1980, but the gap narrowed the respective positions to 17.4 percent for Nebraska and 15.7 percent for the nation.

AGE-SEX DISTRIBUTION

The demographic importance of the various cohorts can best be seen through the series of age-sex pyramids. These pyramids present data for each five-year age group for both females and males. Those in Figure 1 express populations of each age-sex group as percents of the state total. They are called pyramids because the general shape has been in the form of a pyramid. That is, the largest age group was 0 to 4 and the smallest was 75+. Figure 1 traces the changing shape (age structure) of these pyramids for the years 1950 through 1980.

In 1950 the children born during the Depression were 10 to 19 years old, and the effect of the baby boom was just beginning to be felt. If the Depression cohort is followed through the years, it is always smaller than the ones immediately preceding and immediately following it.

The baby boom cohort forms the base of the age-sex pyramid in 1960. This generation stands out as the largest during each of the succeeding years. Because of the pronounced bulge which moves upward through the years, demographers often refer to the baby boom cohort as a "pig in a python." The bulge stands out even more since it is preceded by the relatively small Depression cohort and followed by another small cohort.

The low birth rates of the 1970s resulted in the narrow base of the 1980 pyramid and produced a cohort that has become known as the "baby bust" cohort. Throughout its lifetime, the baby bust of the 1970s will fall in the shadows of the baby boom cohort.

Besides showing the effect of changing birth rates, the age-sex pyramids also reflect the increasing longevity of Nebraskans, especially among women. In 1950 the numbers of people 75 and over exceed only the 70 to 74 group. Thirty years later, however, there were more persons in the 75 and over bracket than in any of the eight preceding age groups. Both sexes didn't share equally in the increase in longevity, as the disparity between males and females widens. In fact, the reason for change in relative size of the 75-and-over age group was due primarily to the sizable expansion in the number of older women.

BIRTHS AND BIRTH RATES

As suggested earlier, changing birth rates can have a marked effect on the age structure of a population, but they are not the only reasons behind a changing age structure. Changes in survival rates will have some effect, especially in the older age categories. In addition, migration rates may differ by age. The primary reason for the variation in age structure from decade to decade, however, has been the variation in the rates and numbers of births.

Table 2 (p. 6) presents data relating to births and birth rates for Nebraska and the United States. The birth rates in Table 2 are the crude birth rates (births per thousand population). The data can be used to explain the variations in the size of age groups mentioned earlier. For example, the small number of births during the 1930s and late 1960s and 1970s means that in 1980 there are relatively few persons in the forties and under fifteen. Similarly, the large number of births in the 1950s led to the large number of 20-year-olds in 1980. As the age pyramids in Figure 1 indicate, the variations in births in any given decade will have an impact on the age distribution for many succeeding decades.

The peak year for births in Nebraska was 1961, with 34,544 births. The lowest number of births occurred near the end of the Depression in 1940 as 22,153 children were born. The crude birth rates for 1951 and 1955 were the highest (24.9 births per thousand). Following the 1955 peak, the birth rate fell gradually and then plummeted downward

(continued on page 6)

(continued from page 3)

to a low of 14.8 in 1973. Since this low, the birth rate has inched its way upward until the rate for 1980 matched the rate of 17.4 for 1970.

Births for the United States followed a trend similar to those of Nebraska, although the years for the highs and lows differed somewhat. Nationally, the largest number of births was 4,307,000 in 1957, and the highest birth rate of 26.6 births per thousand was recorded in 1947. The fewest births (2,307,000) occurred in 1933, while the lowest crude birth rate (14.8) was in 1975 and 1976.

Even though the numbers and rates of births have picked up during the late 1970s, this is not necessarily an indication of a return to the high birth rates of the 1950s. One reason for the increase is that these measures are somewhat misleading because they are not independent of the number of women of child-bearing ages. Numbers of women aged 15 to 44 have increased rapidly as the girls born during the baby boom years pass through their years of prime fertility. Because of this, the number of births and crude birth rates would be expected to rise. The general fertility rate (births per thousand women aged 15 to 44) is a more meaningful measure of fertility because it allows for variation in the number of women. The distinction between the crude birth rate and general fertility rate is evident when comparing data for 1970 and 1980. As mentioned earlier, the crude birth rates for Nebraska were the same in 1970 and 1980. The general fertility rates, however, differ markedly. In 1970, the rate was 87.4 per thousand women 15 to 44 years old, but in 1980 the rate dropped to 77.3.

Table 2
BIRTHS AND BIRTH RATES FOR NEBRASKA AND THE UNITED STATES

	Nebraska		United States	
	Number	Rate*	Number (thousands)	Rate*
1925	29,179	21.5	2,909	25.1
1930	27,006	19.6	2,618	21.3
1935	23,326	17.1	2,377	18.7
1940	22,153	16.8	2,559	19.4
1945	24,292	20.3	2,858	20.4
1950	31,713	23.9	3,632	24.1
1955	34,087	24.9	4,097	25.0
1960	34,257	24.3	4,258	23.7
1965	27,829	18.8	3,760	19.4
1970	25,877	17.4	3,731	18.4
1971	25,507	16.9	3,556	17.2
1972	23,473	15.4	3,258	15.6
1973	22,771	14.8	3,137	14.9
1974	23,695	15.4	3,160	14.9
1975	23,658	15.3	3,144	14.8
1976	23,767	15.3	3,168	14.8
1977	25,158	16.1	3,327	15.4
1978	25,104	16.0	3,333	15.3
1979	26,199	16.6	3,473	15.8
1980	27,335	17.4	3,598	16.2

*Births per thousand population.

Sources: U.S. National Center for Health Statistics, *Vital Statistics of the United States,* annual reports; U.S. Bureau of the Census, *Statistical Abstract of the United States: 1980*; and Nebraska Bureau of Vital Statistics, *Statistical Report: 1980.*

Age-specific birth rates for Nebraska women are presented in Figure 2 (page 2). Since 1960 all age groups of women have experienced fertility declines. The most dramatic drop was for women in their early twenties. Since 1960, when there were nearly 300 births per thousand women, their age-specific rate fell 56 percent. Most of the decline occurred between 1960 and 1970, but since 1970 the rate fell 26 percent. The early twenties typically had been the peak years of childbearing, but Figure 2 shows that in 1980 the late twenties became the peak years. This shift is an indication of the trend toward postponement of births. Further evidence can be seen by looking at the fertility rates of women in their early thirties. Between 1970 and 1980 there was almost no change in the rates for this group.

Because women apparently have postponed their childbearing to later years, the number of births should continue to rise during the 1980s, but the average family size may decline. National survey data on lifetime birth expectations of American women indicate a trend toward lower levels of anticipated childbearing. Among married women 18 to 34, birth expectations averaged 3.1 per woman in 1967, 2.6 in 1971, and 2.2 in 1980. Women 18 to 24 indicated that they expect to have an average of two children each. If their expectations are realized, then their completed level of fertility will be below the natural replacement level of 2.1 births per woman.[5]

J. A. D.

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[5] U.S. Bureau of the Census, "Fertility of American Women: June 1980 (Advance Report)," *Current Population Reports,* No. 364, p. 20.

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Review and Outlook

The level of economic activity in Nebraska increased slightly in June 1980 as a majority of the state's sectors recorded increases in output over the previous month. The physical volume index for the state rose 0.7% from its May level, which puts the index at nearly the same level as it was one year ago. The index is down approximately 5% from the June 1979 level.

Much of the increase in the state's economy was concentrated in the agriculture sector. The agriculture physical volume index increased 14% over the May to June interval. While the index was up in June, it remains below June 1980 levels by approximately 20%. Cash farm marketing receipts were down 1% on a seasonally adjusted basis to $472 million. Nationally, cash farm receipts were up 12.6% on a seasonally adjusted basis to $12.8 billion.

The index of agriculture prices received increased 3.9% for Nebraska farmers, compared with 1.6% for the United States, on a seasonally adjusted basis May-June. Over the interval June 1980-June 1981, agriculture prices received by Nebraska farmers were up 14%, while prices received by U.S. farmers were up 12.2%. Prices paid over the same interval were up 11.8%.

The nonagriculture sector of Nebraska's economy declined 0.5% May-June. Declines in construction and distributing trade offset gains in the manufacturing and government sectors.

The index of physical output in Nebraska's construction sector fell 8.6% on a month-to-month basis. The construction index in June was above that recorded a year ago, (continued on page 5)

Notes for Tables 1 and 2: (1) The "distributive" indicator represents a composite of wholesale and retail trade; transportation, communication and utilities; finance, insurance, and real estate, and selected services. (2) The "physical volume" indicator and its components represent the dollar volume indicator and its components adjusted for price changes using appropriate price indexes—see Table 5, page 5.

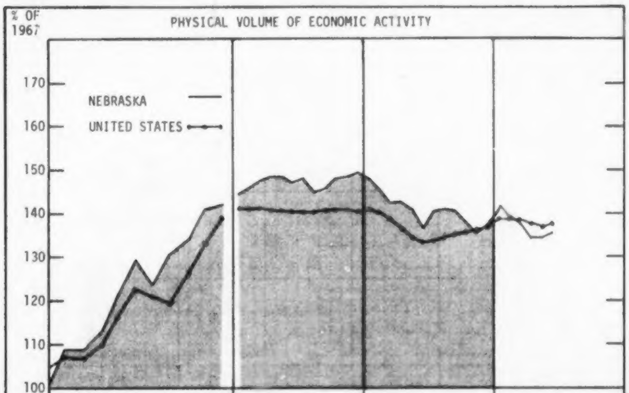
ECONOMIC INDICATORS: NEBRASKA AND UNITED STATES

1. CHANGE FROM PREVIOUS YEAR

June 1981	Current Month as Percent of Same Month Previous Year		1981 Year to Date as Percent of 1980 Year to Date	
Indicator	Nebraska	U.S.	Nebraska	U.S.
Dollar Volume	110.0	112.5	107.0	110.3
Agricultural	95.7	113.4	93.6	105.6
Nonagricultural	111.9	112.5	108.8	110.4
Construction	137.2	108.1	134.4	105.2
Manufacturing	114.5	115.2	107.6	109.2
Distributive	110.8	112.4	108.3	111.9
Government	107.0	109.0	105.6	108.7
Physical Volume	100.4	102.4	97.2	100.0
Agricultural	83.9	101.0	84.4	93.7
Nonagricultural	102.6	102.5	98.8	100.2
Construction	130.7	103.0	125.7	98.5
Manufacturing	104.3	104.4	97.6	98.6
Distributive	101.1	102.6	98.0	101.2
Government	100.7	98.2	98.8	99.7

2. CHANGE FROM 1967

Indicator	Percent of 1967 Average	
	Nebraska	U.S.
Dollar Volume	355.4	353.7
Agricultural	269.7	365.1
Nonagricultural	368.2	353.3
Construction	274.2	314.5
Manufacturing	392.3	321.1
Distributive	373.3	379.9
Government	367.2	332.6
Physical Volume	135.6	137.5
Agricultural	100.6	142.1
Nonagricultural	140.8	137.3
Construction	87.0	99.8
Manufacturing	167.3	133.6
Distributive	137.6	140.0
Government	146.0	149.0

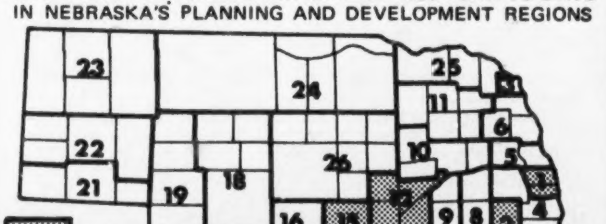


3. NET TAXABLE RETAIL SALES OF NEBRASKA REGIONS AND CITIES (Adjusted for Price Changes)

Region Number and City	City Sales*	Sales in Region*	
	June 1981 as percent of June 1980	June 1981 as percent of June 1980	Year to date'81 as percent of Year to date'80
The State	113.2	112.9	101.5
1 Omaha	118.7	121.6	106.5
Bellevue	161.9		
2 Lincoln	116.5	115.9	103.4
3 So. Sioux City	110.0	109.6	98.3
4 Nebraska City	105.9	103.4	97.8
5 Fremont	110.0	106.7	101.1
Blair	107.6		
6 West Point	102.8	102.4	94.1
7 Falls City	104.1	108.1	97.1
8 Seward	115.0	104 8	99.4
9 York	103.8	100.8	94.3
10 Columbus	118.2	111.7	99.6
11 Norfolk	109.9	113.2	101.2
Wayne	105.4		
12 Grand Island	105.4	103.5	102.1
13 Hastings	114.5	107.2	99.6
14 Beatrice	103.6	100.1	98.7
Fairbury	95.7		
15 Kearney	111.0	107.9	102.4
16 Lexington	102.1	106.7	94.8
17 Holdrege	125.3	112.0	99.7
18 North Platte	107.4	105.2	96.0
19 Ogallala	109.4	107.0	99.6
20 McCook	109.8	105.2	104.5
21 Sidney	103.5	110.1	100.3
Kimball	116.0		
22 Scottsbluff/Gering	92.5	95.2	100.3
23 Alliance	110.0	106.4	99.9
Chadron	124.9		
24 O'Neill	107.6	104.4	99.2
25 Hartington	112.9	107.2	94.8
26 Broken Bow	117.0	105.4	93.7

*State totals include sales not allocated to cities or regions. The year-to-year ratios for city and region sales may be misleading because of changes in the portion of unallocated sales. Region totals include, and city totals exclude, motor vehicle sales. Sales are those on which sales taxes are collected by retailers located in the state. Compiled from data provided by Nebraska Department of Revenue.

1981 YEAR TO DATE AS PERCENT OF 1980 YEAR TO DATE IN NEBRASKA'S PLANNING AND DEVELOPMENT REGIONS



(continued from page 4) but well below that recorded in June 1979 when the index stood at 116.0

Activity in the construction sector has dropped after a modest recovery. June 1980 was the low point in the Nebraska construction index, 66.7. There was a gradual movement upward in activity until March of 1981 when the index peaked at 106.3. Since March, activity in Nebraska's construction sector, as measured by this index, has declined steadily, the index now standing at 87.0.

The index of physical output in Nebraska's manufacturing sector recorded an increase of 0.9% in June. The index is more than 4% higher than June 1980, but about 1% lower than the level recorded in June 1979. Output in Nebraska's manufacturing sector has moved erratically upward over the past year. Most moves have been relatively small and the June increase is no exception.

Output in Nebraska's distributive trade sector declined 1% May-June. The index of physical output stood at 137.6, somewhat above the June 1980 level.

Output in Nebraska's government sector was up 1.2% in June from May levels. The index was one point above that recorded a year ago, but slightly below the level for June 1979.

Nebraska's net taxable retail sales recorded a substantial 22.6% gain in June 1981 compared with earlier sales. When adjustments are made for price changes, net taxable retail sales were up 12.9% over the June 1980 level, a respectable gain.

Non-motor vehicle sales were up 23.1% on an unadjusted basis to $758 million, while motor vehicle sales were up 19.2% on an unadjusted basis to $73 million. Motor vehicle and non-motor vehicle sales were adjusted by the commodity component of the consumer price index to make allowances for the impact of rising prices on sales. The price index increased 8.8% over the interval June 1980-June 1981. The rate of inflation is gradually easing.

Nebraska cities recording substantial increases in retail sales included Bellevue, Holdrege, and Chadron (see Table 3). Several other Nebraska cities recorded substantial gains in retail sales over the interval June 1980-June 1981.

Increases in the city business indices also reflect in the retail sales component. Bellevue, Holdrege, and Chadron top the city business indices list, followed by McCook, Fairbury, and Fremont. The index for Omaha was up near the top, which gives the state a boost since this is a large portion of the Nebraska economy.

D. E. P.

5. PRICE INDEXES

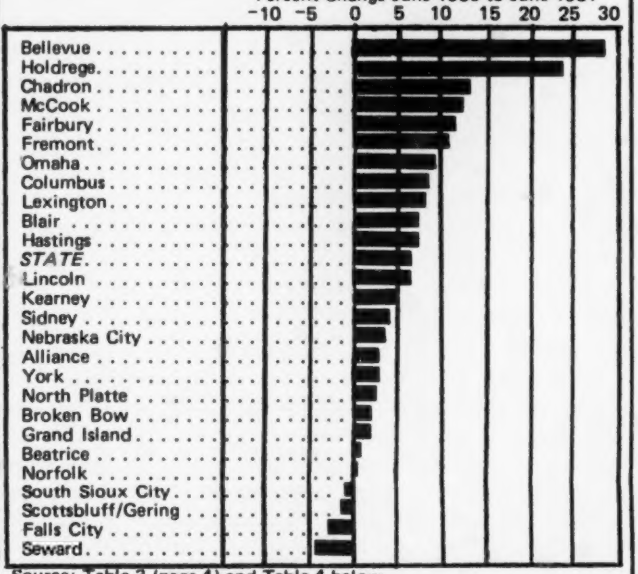
June 1981	Index (1967 = 100)	Percent of Same Month Last Year	Year to Date as Percent of Same Period Last Year*
Consumer Prices	271.3	109.6	110.5
Commodity component	315.0	105.0	106.7
Wholesale Prices	294.5	110.9	109.8
Agricultural Prices			
United States	257.0	112.2	112.7
Nebraska	268.0	114.0	110.9

*Using arithmetic average of monthly indexes.

Sources: Consumer and Wholesale Prices: U.S. Bureau of Labor Statistics; Agricultural Prices: U.S. Department of Agriculture.

CITY BUSINESS INDEXES

Percent Change June 1980 to June 1981



Source: Table 3 (page 4) and Table 4 below.

4. JUNE CITY BUSINESS INDICATORS

The State and Its Trading Centers	Percent of Same Month a Year Ago		
	Employment[1]	Building Activity[2]	Power Consumption[3]
The State	101.5	101.4	103.2
Alliance	98.1	85.5	90.4
Beatrice	95.7	122.5	93.5
Bellevue	101.9	101.8	106.5
Blair	104.0	153.2	95.7
Broken Bow	101.6	28.6	96.6
Chadron	104.4	82.2	107.1
Columbus	102.8	78.4	98.2
Fairbury	101.8	1225.1	98.3
Falls City	101.8	31.9	105.1
Fremont	106.1	198.7	99.9*
Grand Island	101.2	86.2	122.1
Hastings	101.7	99.9	105.3
Holdrege	102.6	926.7	159.9
Kearney	101.8	85.7	113.3
Lexington	103.2	313.8	100.8
Lincoln	101.1	75.8	98.0
McCook	102.2	358.2	198.2
Nebraska City	100.7	109.6	91.9
Norfolk	100.8	40.8	108.0
North Platte	100.0	88.0	106.6
Omaha	100.2	126.3	100.0
Scottsbluff/Gering	103.7	106.9	102.3
Seward	101.9	24.7	101.1
Sidney	102.0	79.9	98.2
So. Sioux City	97.0	44.9	98.9
York	103.3	93.7	103.0

[1] As a proxy for city employment, total employment for the county in which a city is located is used.

[2] Building Activity is the value of building permits issued as spread over an appropriate time period of construction. The U.S. Department of Commerce Composite Construction Cost Index is used to adjust construction activity for price changes.

[3] Power Consumption is a combined index of consumption of electricity and natural gas except in cases marked * for which only one is used.

Source: Compilation by Bureau of Business Research from reports of private and public agencies.